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JANUARY 1979 • VOL 66 • NO 1

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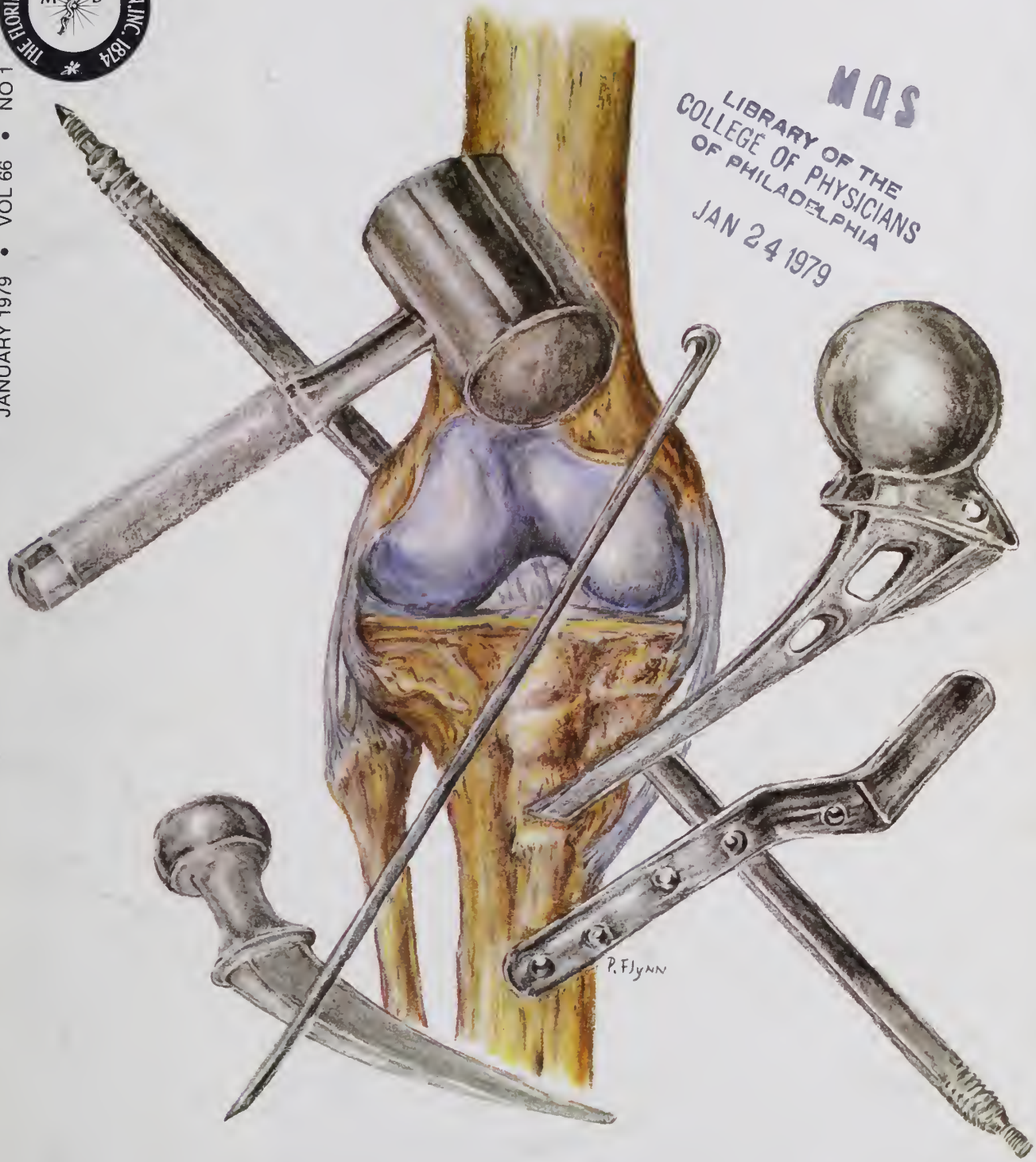


# SPECIAL ISSUE ON ORTHOPAEDIC SURGERY

Joseph C. Flynn, M.D.
and
Ronald J. Mann, M.D.
Guest Editors

# THE MESSAGE OF TENSION

HEADACHES
SWEATS
TENSE, TAUT MUSCLES
HYPERVENTILATION
TACHYCARDIA
PALPITATIONS
BURNING IN STOMACH
FULLNESS
FREQUENCY

## to relieve psychic tension and its functional symptoms

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**VALIUM®(diazepam)**

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**Indications:** Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).
The effectiveness of Valium in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

**Contraindicated:** Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.
**Warnings:** Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**
**Precautions:** If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.
**Side Effects:** Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported, should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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JANUARY 1979 • VOL 66 • NO 1

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# This Issue

**We are indebted to Dr. Joseph C. Flynn and Dr. Ronald J. Mann, Guest Editors of this issue, for bringing this special issue on Orthopaedic Surgery to our readers. We are also most grateful to all of the authors and contributors to this issue of The Journal. (See Contents on opposite page).**

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THE COVER: By a budding young medical illustrator, Patricia A. Flynn, B.A. FTU in Art Education, currently teaching elementary and secondary art in the Orange County School System.

The knee joint symbolizes the musculoskeletal system. The mallet emphasizes the physical energy often expended by the orthopaedist to accomplish his work. The various implant devices symbolize the progressive advances in orthopaedic surgery in recent years.

# SPECIAL ISSUE

## ORTHOPAEDIC SURGERY

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# President's Page

## Solving the Problem

THE AMA HOUSE OF DELEGATES HAS OVERWHELMINGLY ADOPTED FLORIDA'S RESOLUTION OPPOSING COMPULSORY NATIONAL HEALTH INSURANCE AND RECOMMENDING IMPROVEMENTS TO OUR CURRENT MEDICAL CARE SYSTEM IN AMERICA.

The Florida resolution was adopted by nearly a 2 to 1 majority on December 6, in the face of strong opposition from the AMA Board of Trustees, the Councils on Legislation and Medical Services, and the report of the Reference Committee recommending approval of the Board of Trustees Report. This report called for reintroduction in the 96th Congress of a broad-based, comprehensive, and mandatory national health insurance bill, "The Health Care Improvement Act of 1979".

Due to the extreme importance and far-reaching effects of this issue, the full text of the Florida resolution is printed on the opposite page for your information.

THE HOUSE ALSO APPROVED A MOTION BY THE FLORIDA DELEGATION STIPULATING THAT THE BOARD OF TRUSTEES INTRODUCE A NATIONAL HEALTH INSURANCE BILL IN CONGRESS **ONLY** IF NECESSARY, AND THAT THE BILL INCLUDE **ONLY** THE FOUR PRINCIPLES EMBODIED IN THE FLORIDA RESOLUTION.

Your AMA delegates and alternate delegates unanimously supported and worked for passage of the Florida resolution. Florida Delegate, Doctor Joe Von Thron, led the debate on the House floor with an eloquent 15-minute address in support of the Florida Resolution and received a resounding ovation. Details regarding the House of Delegates' action are printed in the December 15, 1978, issue of the AM NEWS.

Our success on this crucial issue is a vivid demonstration of the positive benefits derived from our individual and collective participation in the AMA and in organized medicine at all levels.

I am grateful to the many FMA members who responded to my memorandum of October 20, regarding the large number of FMA members who had not renewed their 1978 AMA membership. Florida now has in excess of the number required to maintain our seventh delegate to the AMA for 1979.

Our strength in the AMA House of Delegates insures the greatest degree of influence in protecting the best interest of the physicians of Florida in the ultimate decisions of the House of Delegates. Your profession needs you, and your continued participation is greatly appreciated.

O. Wm. Davenport M.D.

O. William Davenport, M.D.
President

## (ADOPTED BY THE AMA HOUSE OF DELEGATES DECEMBER 6, 1978, CHICAGO, ILLINOIS)

# AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES

Resolution: 62
(I-78)

**Introduced by:** Florida Delegation

**Subject:** National Health Insurance

**Referred to:** Reference Committee B
(Robert E. Rice, M.D., Chairman)

Whereas, It is a recognized fact that Americans have the best medical care and delivery system in the world today, and most polls indicate the public is generally satisfied with both the quality and quantity of medical services; and

Whereas, The polls have consistently reflected that the American people hold their individual physician in higher regard and trust than any other professional; and

Whereas, It is this very personal doctor-patient relationship that will be dismantled and ultimately destroyed by national health insurance; and

Whereas, The primary thrust for a nationalized, socialized system of medical care has continuously come from the political arena where logic is often lacking; and

Whereas, At this time, it would be unwise for organized medicine, at any level, to sponsor or support federal legislation to further nationalize or socialize physicians' services in this country; and

Whereas, There is a need to improve our present system — not by discarding or disregarding our present one; therefore be it

RESOLVED, That the American Medical Association recommend to the Congress of the United States of America modifications to our present health care system embodying the following principles:

1. Requiring minimum standards of adequate benefits in all health insurance policies sold in the United States with appropriate deductible and co-insurance.

2. A simple system of uniform benefits provided by the federal, state, and local governments for those individuals who are unfortunate enough (through no fault of their own, *i.e.*, age, disability, financial hardship, etc.) not to be able to provide for their own medical care.

3. A nationwide program by the private insurance industry of America (and government if necessary for reinsurance) to make available catastrophic insurance coverage for those illnesses and individuals where the economic impact of a catastrophic illness could be tragic. All catastrophic coverage should have an appropriate deductible and co-insurance to make it economically feasible and to avoid abuse.

4. A program developed pursuant to these principles should be administered at the state level with national standardization through federal guidelines.

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The Florida Medical Association's Professional Overhead Expense Plan can help you meet your overhead expenses when you are totally disabled. Many fixed expenses are not eliminated when you are unable to practice — rent, employee's salaries, utilities, phones and other costs continue; some even if your office is closed.

The essential yet economical coverage from this plan can provide benefits up to $5,000 monthly for covered office expenses incurred while you're disabled by accident or sickness. And our low tax deductible rates make it practical, too.

Choose from two plans:

PLAN I — Provides benefits after 15 days of disability

PLAN II — Provides benefits after 30 days of disability

HOUSE OR HOSPITAL CONFINEMENT IS NOT REQUIRED!

For further information concerning the Plan, contact
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# How much is "too much" milk?

lk, like many foods today, is being looked at much more closely than er before by physicians and nutritionists.

And well it should be.

Because we recognize that too much milk, like too much of any one od, can fill a child up and consequently, can keep him from eating her foods he needs. Particularly, iron-rich foods.

But let's also make sure children get enough milk. Because milk pplies more essential nutrients per calorie than most other foods.

A child between the ages of six months and six years, for example, n get at least three-fourths of his daily dietary allowance for calcium, oflavin, vitamins D and $B_{12}$, phosphorous, and protein from just three asses of milk. And milk is also a good source of vitamins A and $B_6$, as ell as thiamin and niacin.

That's why the U.S.D.A., acting on the recommendation of the Na- onal Research Council—National Academy of Sciences, has estab- hed these guidelines for milk consumption:

**Children up to 6 years**
Two to three 8 oz. glasses per day.

**Children 6 to 12 years**
Three or more 8 oz. glasses per day.

For a free copy of the Dairy Council Digest issue titled, "Composi- on and Nutrient Value of Dairy Foods," contact your local Dairy ouncil or write the National Dairy Council, 6300 North River Road, osemont, Illinois 60018.

**Per cent of Recommended Daily Allowance contributed by three 8 oz. glasses of fortified milk.**

| | 6 mos.—1 yr. | 1 yr.—3 yrs. | 3 yrs.—6 yrs. |
|---|---|---|---|
| Calcium | 100% | 100% | 100% |
| Riboflavin | 100 | 100 | 100 |
| Vitamin $B_{12}$ | 100 | 100 | 100 |
| Protein | 100 | 100 | 80 |
| Phosphorus | 100 | 85 | 85 |
| Vitamin $B_6$ | 76 | 51 | 34 |
| Vitamin D | 75 | 75 | 75 |
| Niacin* | 71 | 63 | 47 |
| Thiamin | 56 | 40 | 31 |
| Vitamin A | 46 | 46 | 37 |

*maximum niacin equivalents based on: 60 mg tryptophan=1 mg niacin

ndc **National Dairy Council**

**Milk. Sometimes we forget all the good things it does.**

# AMERICA'S MOST LUXURIOUS MOTOR HOME

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ne of today's trends
n oral contraception . . .

# stepping down estrogen levels to 50 mcg?

Do you have patients currently taking oral contraceptives containing 100 mcg of estrogen for contraception? A switch to a 50 mcg product may be desirable.§

Prospective and retrospective studies indicate a relationship between estrogen doses and serious adverse side effects. ". . . preparations containing 100 mcg or more of estrogen were associated with a higher risk of thromboembolism. . ."†

The incidence of these side effects decreases as the dosage of estrogen decreases to 50 mcg, as demonstrated in British studies.†

†See Prescribing Information.

a step in the right direction

# Ortho-Novum 1/50

TRADEMARK

21 and 28-day regimens

Each yellow tablet contains 1 mg norethindrone and 0.05 mg mestranol.
Each green tablet in the 28-day regimen contains inert ingredients.

§Serious as well as minor side effects have been reported with the use of oral contraceptives. These include thromboembolic disease. The physician should remain alert to the earliest manifestations of any symptoms of serious disease and discontinue oral contraceptive therapy when appropriate. The physician should be fully aware of the complete Prescribing Information for this product.

See the complete Prescribing Information for this product, a summary of which is on the next page.

© Ortho Pharmaceutical Corporation 1978

OJ 1291

# ORTHO-NOVUM* Tablets

**IMPORTANT NOTE—This information is a BRIEF SUMMARY of the complete prescribing information provided with the product and therefore should not be used as the basis for prescribing the product. This summary was prepared by deleting from the complete prescribing information certain text, tables, and references. The physician should be thoroughly familiar with the complete prescribing information and patient information before prescribing the product.**

**INDICATION: CONTRACEPTION.** The pregnancy rate in women using conventional combination oral contraceptives (containing 35 mcg or more of ethinyl estradiol or 50 mcg or more of mestranol) is generally reported as less than one pregnancy per 100 woman-years of use. Slightly higher rates (somewhat more than one pregnancy per 100 woman-years of use) are reported for some combination products containing 35 mcg or less of ethinyl estradiol, and rates on the order of three pregnancies per 100 woman-years are reported for the progestogen-only oral contraceptives. Table 1 gives ranges of pregnancy rates reported in the literature for other means of contraception. The efficacy of these means of contraception (except the IUD) depends upon the degree of adherence to the method.

**Table 1: Pregnancies Per 100 Woman-Years.** IUD, less than 1-6; Diaphragm with spermicidal product (creams or jellies), 2-20; Condom, 3-36; Aerosol foams, 2-29; Jellies and creams, 4-36; Periodic abstinence (rhythm) all types, less than 1-47; 1. Calendar method, 14-47; 2. Temperature method, 1-20; 3. Temperature method—intercourse only in postovulatory phase, less than 1-7; 4. Mucus method, 1-25; No contraception, 60-80. **DISEASE-RELATED RISK OF THROMBOEMBOLISM FROM ORAL CONTRACEPTIVES:** Two studies have shown a positive association between the dose of estrogens in oral contraceptives and the risk of thromboembolism. For this reason, it is prudent and in keeping with good principles of therapeutics to minimize exposure to estrogen. The oral contraceptive product prescribed for any given patient should be that product which contains the least amount of estrogen that is compatible with an acceptable pregnancy rate and patient acceptance. It is recommended that new acceptors of oral contraceptives be started on preparations containing .05 mg or less of estrogen.

**CONTRAINDICATIONS:** Oral contraceptives should not be used in women with any of the following conditions: 1. Thrombophlebitis or thromboembolic disorders. 2. A past history of deep vein thrombophlebitis or thromboembolic disorders. 3. Cerebral vascular or coronary artery disease. 4. Known or suspected carcinoma of the breast. 5. Known or suspected estrogen-dependent neoplasia. 6. Undiagnosed, abnormal genital bleeding. 7. Known or suspected pregnancy (see WARNINGS, No. 5).

## WARNINGS

**Cigarette smoking increases the risk of serious cardiovascular side effects from oral contraceptive use. This risk increases with age and with heavy smoking (15 or more cigarettes per day) and is quite marked in women over 35 years of age. Women who use oral contraceptives should be strongly advised not to smoke.**

**The use of oral contraceptives is associated with increased risk of several serious conditions including thromboembolism, stroke, myocardial infarction, hepatic adenoma, gallbladder disease, hypertension. Practitioners prescribing oral contraceptives should be familiar with the following information relating to these risks.**

1. THROMBOEMBOLIC DISORDERS AND OTHER VASCULAR PROBLEMS. An increased risk of thromboembolic and thrombotic disease associated with the use of oral contraceptives is well established. Four principal studies in Great Britain and three in the United States have demonstrated an increased risk of fatal and nonfatal venous thromboembolism and stroke, both hemorrhagic and thrombotic. These studies estimate that users of oral contraceptives are 4 to 11 times more likely than nonusers to develop these diseases without evident cause. Overall excess mortality due to pulmonary embolism or stroke is on the order of 1.0 to 3.5 deaths annually per 100,000 users and increases with age. **CEREBROVASCULAR DISORDERS:** In a collaborative American study of cerebrovascular disorders in women with and without predisposing causes, it was estimated that the risk of hemorrhagic stroke was 2.0 times greater in users than in nonusers and the risk of thrombotic stroke was 4.0 to 9.5 times greater in users than in nonusers.

**MYOCARDIAL INFARCTION:** An increased risk of myocardial infarction associated with the use of oral contraceptives has been reported confirming a previously suspected association. These studies, conducted in the United Kingdom, found, as expected, that the greater the number of underlying risk factors for coronary artery disease (cigarette smoking, hypertension, hypercholesterolemia, obesity, diabetes, history of preeclamptic toxemia), the higher the risk of developing myocardial infarction, regardless of whether the patient was an oral contraceptive user or not. Oral contraceptives, however, were found to be a clear additional risk factor. The annual excess case rate (increased risk) of myocardial infarction (fatal and nonfatal) in oral contraceptive users was estimated to be approximately 7 cases per 100,000 women users in the 30-39 age group and 67 cases per 100,000 women users in the 40-44 age group. In terms of relative risk, it has been estimated that oral contraceptive users who do not smoke (smoking is considered a major predisposing condition to myocardial infarction) are about twice as likely to have a fatal myocardial infarction as nonusers who do not smoke. Oral contraceptive users who are also smokers have about a 5-fold increased risk of fatal infarction compared to users who do not smoke, but about a 10-to 12-fold increased risk compared to nonusers who do not smoke. Furthermore, the amount of smoking is also an important factor. In determining the importance of these relative risks, however, the baseline rates for various age groups must be given serious consideration. The importance of other predisposing conditions mentioned above in determining relative and absolute risks has not as yet been quantified; it is quite likely that the same synergistic action exists, but perhaps to a lesser extent. **Risk of Dose:** In an analysis of data derived from several national adverse reaction reporting systems, British investigators concluded that the risk of thromboembolism including coronary thrombosis is directly related to the dose of estrogen used in oral contraceptives. Preparations containing 100 mcg or more of estrogen were associated with a higher risk of thromboembolism than those containing 50-80 mcg of estrogen. Their analysis did suggest, however, that the quantity of estrogen may not be the sole factor involved. This finding has been confirmed in the United States. Careful epidemiological studies to determine the degree of thromboembolic risk associated with progestogen-only oral contraceptives have not been performed. Cases of thromboembolic disease have been reported in women using these products, and they should not be presumed to be free of excess risk. The risk of thromboembolic and thrombotic disorders, in both users and nonusers of oral contraceptives, increases with age. Oral contraceptives are, however, an independent risk factor for these events. **ESTIMATE OF EXCESS MORTALITY FROM CIRCULATORY DISEASES:** A large prospective study carried out in the United Kingdom estimated the mortality rate per 100,000 women per year from diseases of the circulatory system for users and nonusers of oral contraceptives according to age, smoking habits, and duration of use. The overall excess death rate annually from circulatory diseases for oral contraceptive users was estimated to be 20 per 100,000 (ages 15-34—5/100,000; ages 35-44—33/100,000; ages 45-49—140/100,000), the risk being concentrated in older women, in those with a long duration of use, and in cigarette smokers. It was not possible, however, to examine the interrelationships of age, smoking, and duration of use, nor to compare the effects of continuous versus intermittent use. Although the study showed a 10-fold increase in death due to circulatory diseases in users for five or more years, all of these deaths occurred in women 35 or older. Until larger numbers of women under 35 with continuous use for five or more years are available, it is not possible to assess the magnitude of the relative risk for this younger age group. This study reports that the increased risk of circulatory diseases may persist after the pill is discontinued. Another study published at the same time confirms a previously reported increase of mortality in pill users from cardiovascular disease. The available data from a variety of sources have been analyzed to estimate the risk of death associated with various methods of contraception. The estimates of risk of death for each method include the combined risk of the contraceptive method (e.g., thromboembolic and thrombotic disease in the case of oral contraceptives) plus the risk attributable to pregnancy or abortion in the event of method failure. This latter risk varies with the effectiveness of the contraceptive method. The findings of this analysis are shown in Figure 1 below. The study concluded that the mortality associated with all methods of birth control is low and below that associated with childbirth, with the exception of oral contraceptives in women over 40 who smoke. (The rates given for pill only/smokers for each age group are for smokers as a class. For "heavy" smokers [more than 15 cigarettes a day], the rates given would be about double; for "light" smokers [less than 15 cigarettes a day], about 50 percent.) The mortality associated with oral contraceptive use in nonsmokers over 40 is higher than with any other method of contraception in that age group. The lowest mortality is associated with the condom or diaphragm backed up by early abortion. The risk of thromboembolic and thrombotic disease associated with oral contraceptives increases with age after approximately age 30 and, for myocardial infarction, is further increased by hypertension, hypercholesterolemia, obesity, diabetes, or history of preeclamptic toxemia and especially by cigarette smoking. The risk of myocardial infarction in oral contraceptive users is substantially increased in women age 40 and over, especially those with other risk factors. The use of oral contraceptives in women in this age group is not recommended. Based on the data currently available, the following chart gives a gross estimate of the risk of death from circulatory disorders associated with the use of oral contraceptives:

**SMOKING HABITS AND OTHER PREDISPOSING CONDITIONS—RISK ASSOCIATED WITH USE OF ORAL CONTRACEPTIVES**

| Age | Below 30 | 30-39 | 40+ | |
|---|---|---|---|---|
| Heavy smokers | C | B | A | A—Use associated with very high risk |
| Light smokers | 0 | C | B | B—Use associated with high risk. |
| Nonsmokers (no predisposing conditions) | 0 | C,0 | C | C—Use associated with moderate risk |
| Nonsmokers (other predisposing conditions) | C | C,B | B,A | 0—Use associated with low risk. |

The physician and the patient should be alert to the earliest manifestations of thromboembolic and thrombotic disorders (e.g., thrombophlebitis, pulmonary embolism, cerebrovascular insufficiency, coronary occlusion, retinal thrombosis, and mesenteric thrombosis). Should any of these occur or be suspected, the drug should be discontinued immediately. A four- to six-fold increased risk of postsurgery thromboembolic complications has been reported in oral contraceptive users. If feasible, oral contraceptives should be discontinued at least four weeks before surgery of a type associated with an increased risk of thromboembolism or prolonged immobilization. 2. OCULAR LESIONS. There have been reports of neuro-ocular lesions such as optic neuritis or retinal thrombosis associated with the use of oral contraceptives. Discontinue oral contraceptive medication if there is unexplained, sudden or gradual, partial or complete loss of vision; onset of proptosis or diplopia; papilledema; or retinal vascular lesions and institute appropriate diagnostic and therapeutic measures. 3. CARCINOMA. Long-term continuous administration of either natural or synthetic estrogen in certain animal species increases the frequency of carcinoma of the breast, cervix, vagina, and liver. Certain synthetic progestogens, none currently contained in oral contraceptives, have been noted to increase the incidence of mammary nodules, benign and malignant, in dogs. In humans, three case control studies have reported an increased risk of endometrial carcinoma associated with the prolonged use of exogenous estrogen in postmenopausal women. One publication reported on the first 21 cases submitted by physicians to a registry of cases of adenocarcinoma of the endometrium in women under 40 on oral contraceptives. Of the cases found in women without predisposing risk factors for adenocarcinoma of the endometrium (e.g., irregular bleeding at the time oral contraceptives were first given, polycystic ovaries), nearly all occurred in women who had used a sequential oral contraceptive. These products are no longer marketed. No evidence has been reported suggesting an increased risk of endometrial cancer in users of conventional combination or progestogen-only oral contraceptives. Several studies have found no increases in breast cancer in women taking oral contraceptives or estrogens. One study, however, while also noting no overall increased risk of breast cancer in women treated with oral contraceptives, found an excess risk in the subgroups of oral contraceptive users with documented benign breast disease. A reduced occurrence of benign breast tumors in users of oral contraceptives has been well-documented. In summary, there is at present no confirmed evidence from human studies of an increased risk of cancer associated with oral contraceptives. Close clinical surveillance of all women taking oral contraceptives is, nevertheless, essential. In all cases of undiagnosed persistent or recurrent abnormal vaginal bleeding, appropriate diagnostic measures should be taken to rule out malignancy. Women with a strong family history of breast cancer or who have breast nodules, fibrocystic disease or abnormal mammograms should be monitored with particular care if they elect to use oral contraceptives instead of other methods of contraception.

Figure 1. Estimated annual number of deaths associated with control of fertility and no control per 100,000 nonsterile women, by regimen of control and age of woman.

| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 |
|---|---|---|---|---|---|---|
| No method | 5.5 | 5.2 | 7.1 | 14.0 | 19.3 | 21.9 |
| Abortion only | 2.3 | 2.5 | 2.5 | 5.2 | 9.8 | 6.6 |
| Pill only-nonsmokers | 1.3 | 1.4 | 1.4 | 2.2 | 4.5 | 3.1 |
| Pill only-smokers | 1.5 | 1.6 | 1.6 | 10.8 | 13.4 | 58.9 |
| IUDs only | 1.1 | 1.2 | 1.2 | 1.4 | 1.6 | 1.4 |
| Traditional contraception only | 1.1 | 1.4 | 1.9 | 3.7 | 4.7 | 4.0 |
| Traditional contraception and abortion | 0.3 | 0.4 | 0.4 | 0.8 | 1.4 | 0.8 |

4. HEPATIC TUMORS. Benign hepatic adenomas have been found to be associated with the use of oral contraceptives. One study showed that oral contraceptive formulations with high hormonal potency were associated with a higher risk than lower potency formulations. Although benign, hepatic adenomas may rupture and may cause death through intra-abdominal hemorrhage. This has been reported in short-term as well as long-term users of oral contraceptives. Two studies relate risk with duration of use of the contraceptive, the risk being much greater after four or more years of oral contraceptive use. While hepatic adenoma is a rare lesion, it should be considered in women presenting abdominal pain and tenderness, abdominal mass or shock. A few cases of hepatocellular carcinoma have been reported in women taking oral contraceptives. The relationship of these drugs to this type of malignancy is not known at this time. 5. USE IN OR IMMEDIATELY PRECEDING PREGNANCY, BIRTH DEFECTS IN OFFSPRING, AND MALIGNANCY IN FEMALE OFFSPRING. The use of female sex hormones—both estrogenic and progestational agents—during early pregnancy may seriously damage the offspring. It has been shown that females exposed in utero to diethylstilbestrol, a nonsteroidal estrogen, have an increased risk of developing in later life a form of vaginal or cervical cancer that is ordinarily extremely rare. This risk has been estimated to be on the order of 1 to 4 in 1000 exposures. Although there is no evidence at the present time that oral contraceptives further enhance the risk of developing this type of malignancy, such patients should be monitored with particular care if they elect to use oral contraceptives instead of other methods of contraception. Furthermore, a high percentage of such exposed women (from 30 to 90%) have been found to have epithelial changes of the vagina and cervix. Although these changes are histologically benign, it is not known whether this condition is a precursor of vaginal malignancy. Male children so exposed may develop abnormalities of the urogenital tract. Although similar data are not available with the use of other estrogens, it cannot be presumed that they would not induce similar changes. An increased risk of congenital anomalies, including heart defects and limb defects, has been reported with the use of sex hormones, including oral contraceptives, in pregnancy. One case control study has estimated a 4.7-fold increase in risk of limb-reduction defects in infants exposed in utero to sex hormones (oral contraceptives, hormonal withdrawal tests for pregnancy or attempted treatment for threatened abortion). Some of these exposures were very short and involved only a few days of treatment. The data suggest that the risk of limb-reduction defects in exposed fetuses is somewhat less than one in 1,000 live births. In the past, female sex hormones have been used during pregnancy in an attempt to treat threatened or habitual abortion. There is considerable evidence that estrogens are ineffective for these indications, and there is no evidence from well-controlled studies that progestogens are effective for these uses. There is some evidence that triploidy and possibly other types of polyploidy are increased among abortuses from women who become pregnant soon after ceasing oral contraceptives. Embryos with these anomalies are virtually always aborted spontaneously. Whether there is an overall increase in spontaneous abortion of pregnancies conceived soon after stopping oral contraceptives is unknown. Pregnancy should be ruled out before initiating or continuing the contraceptive regimen. Pregnancy should always be considered if withdrawal bleeding does not occur. If pregnancy is confirmed, the patient should be apprised of the potential risks to the fetus and the advisability of continuation of the pregnancy should be discussed in the light of these risks. It is also recommended that women who discontinue oral contraceptives with the intent of becoming pregnant use an alternate form of contraception for a period of time before attempting to conceive. Many clinicians recommend three months although no precise information is available on which to base this recommendation. The administration of progestogen-only or progestogen-estrogen combinations to induce withdrawal bleeding should not be used as a test of pregnancy. 6. GALLBLADDER DISEASE. Studies report an increased risk of surgically confirmed gallbladder disease in users of oral contraceptives and estrogens. In one study, an increased risk appeared after two years of use and doubled after four or five years of use. In one of the other studies, an increased risk was apparent between six and twelve months of use. 7. CARBOHYDRATE AND LIPID METABOLIC EFFECTS. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. For this reason, prediabetic and diabetic patients should be carefully observed while receiving oral contraceptives. An increase in triglycerides and total phospholipids has been observed in patients receiving oral contraceptives. 8. ELEVATED BLOOD PRESSURE. An increase in blood pressure has been reported in patients receiving oral contraceptives. In some women hypertension may occur within a few months of beginning oral contraceptive use. In the first year of use, the prevalence of women with hypertension is low in users and may be no higher than that of a comparable group of nonusers. The prevalence in users increases, however, with longer exposure, and in the fifth year of use is two and a half to three times the reported prevalence in the first year. Age is also strongly correlated with the development of hypertension in oral contraceptive users. Women who previously have had hypertension during pregnancy may be more likely to develop elevation of blood pressure when given oral contraceptives. Hypertension that develops as a result of taking oral contraceptives usually returns to normal after discontinuing the drug. 9. HEADACHE. The onset or exacerbation of migraine or development of headache of a new pattern which is recurrent, persistent, or severe, requires discontinuation of oral contraceptives and evaluation of the cause. 10. BLEEDING IRREGULARITIES. Breakthrough bleeding, spotting, and amenorrhea are frequent reasons for patients discontinuing oral contraceptives. In breakthrough bleeding, as in all cases of irregular bleeding from the vagina, nonfunctional causes should be borne in mind. In undiagnosed persistent or recurrent abnormal bleeding from the vagina, adequate diagnostic measures are indicated to rule out pregnancy or malignancy. If pathology has been excluded, time or a change to another formulation may solve the problem. Changing to an oral contraceptive with a higher estrogen content, while potentially useful in minimizing menstrual irregularity, should be done only if necessary since this may increase the risk of thromboembolic disease. Women with a past history of oligomenorrhea or secondary amenorrhea or young women without regular cycles may have a tendency to remain anovulatory or to become amenorrheic after discontinuation of oral contraceptives. Women with these preexisting problems should be advised of this possibility and encouraged to use other contraceptive methods. Postuse anovulation, possibly prolonged, may also occur in women without previous irregularities. 11. ECTOPIC PREGNANCY. Ectopic as well as intrauterine pregnancy may occur in contraceptive failures. 12. BREAST FEEDING. Oral contraceptives given in the postpartum period may interfere with lactation. There may be a decrease in the quantity and quality of the breast milk. Furthermore, a small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The effects, if any, on the breast-fed child have not been determined. If feasible, the use of oral contraceptives should be deferred until the infant has been weaned. **PRECAUTIONS: General:** 1. A complete medical and family history should be taken prior to the initiation of oral contraceptives. The pretreatment and periodic physical examinations should include special reference to blood pressure, breasts, abdomen and pelvic organs, including Papanicolaou smear and relevant laboratory tests. As a general rule, oral contraceptives should not be prescribed for longer than one year without another physical examination being performed. 2. Under the influence of estrogen-progestogen preparations, preexisting uterine leiomyomata may increase in size. 3. Patients with a history of psychic depression should be carefully observed and the drug discontinued if depression recurs to a serious degree. Patients becoming significantly depressed while taking oral contraceptives should stop the medication and use an alternate method of contraception in an attempt to determine whether the symptom is drug-related. 4. Oral contraceptives may cause some degree of fluid retention. They should be prescribed with caution, and only with careful monitoring, in patients with conditions which might be aggravated by fluid retention, such as convulsive disorders, migraine syndrome, asthma, or cardiac or renal insufficiency. 5. Patients with a past history of jaundice during pregnancy have an increased risk of recurrence of jaundice while receiving oral contraceptive therapy. If jaundice develops in any patient receiving such drugs, the medication should be discontinued. 6. Steroid hormones may be poorly metabolized in patients with impaired liver function and should be administered with caution in such patients. 7. Oral contraceptive users may have disturbances in normal tryptophan metabolism which may result in a relative pyridoxine deficiency. 8. Serum folate levels may be depressed by oral contraceptive therapy. Since the pregnant woman is predisposed to the development of folate deficiency and the incidence of folate deficiency increases with increasing gestation, it is possible that if a woman becomes pregnant shortly after stopping oral contraceptives, she may have a greater chance of developing folate deficiency and complications attributed to this deficiency. 9. The pathologist should be advised of oral contraceptive therapy when relevant specimens are submitted. 10. Certain endocrine and liver function tests and blood components may be affected by estrogen-containing oral contraceptives: a. Increased sulfobromophthalein retention. b. Increased prothrombin and factors VII, VIII, IX, and X; decreased antithrombin 3; increased norepinephrine-induced platelet aggregability. c. Increased thyroid-binding globulin (TBG) leading to increased circulating total thyroid hormone, as measured by protein-bound iodine (PBI), T4 by column, or T4 by radioimmunoassay. Free T3 resin uptake is decreased, reflecting the elevated TBG, free T4 concentration is unaltered. d. Decreased pregnanediol excretion. e. Reduced response to metyrapone test. **INFORMATION FOR THE PATIENT: (See Patient Package Insert). DRUG INTERACTIONS:** Reduced efficacy and increased incidence of breakthrough bleeding have been associated with concomitant use of rifampin. A similar association has been suggested with barbiturates, phenylbutazone, phenytoin sodium, and ampicillin. **CARCINOGENESIS, PREGNANCY, NURSING MOTHERS: See CONTRAINDICATIONS and WARNINGS. ADVERSE REACTIONS:** An increased risk of the following serious adverse reactions has been associated with the use of oral contraceptives (see WARNINGS): Thrombophlebitis. Pulmonary embolism. Coronary thrombosis. Cerebral thrombosis. Cerebral hemorrhage. Hypertension. Gallbladder disease. Liver tumors. Congenital anomalies. There is evidence of an association between the following conditions and the use of oral contraceptives, although additional confirmatory studies are needed. Mesenteric thrombosis. Neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis. The following adverse reactions have been reported in patients receiving oral contraceptives and are believed to be drug-related: Nausea, usually the most common adverse reaction. Vomiting, occurs in approximately 10% or less of patients during the first cycle. Other reactions, as a general rule, are seen much less frequently or only occasionally. Gastrointestinal symptoms (such as abdominal cramps and bloating). Breakthrough bleeding. Spotting. Change in menstrual flow. Dysmenorrhea. Amenorrhea during and after treatment. Temporary intertility after discontinuance of treatment. Edema. Chloasma or melasma which may persist. Breast changes: tenderness, enlargement, and secretion. Change in weight (increase or decrease). Change in cervical erosion and cervical secretion. Possible diminution in lactation when given immediately postpartum. Cholestatic jaundice. Migraine. Increase in size of uterine leiomyomata. Rash (allergic). Mental depression. Reduced tolerance to carbohydrates. Vaginal candidiasis. Change in corneal curvature (steepening). Intolerance to contact lenses. The following adverse reactions have been reported in users of oral contraceptives, and the association has been neither confirmed nor refuted: Premenstrual-like syndrome. Cataracts. Changes in libido. Chorea. Changes in appetite. Cystitis-like syndrome. Headache. Nervousness. Dizziness. Hirsutism. Loss of scalp hair. Erythema multiforme. Erythema nodosum. Hemorrhagic eruption. Vaginitis. Porphyria. Impaired renal function. (ORTHO-NOVUM 1/50□21 and ORTHO-NOVUM 1/50□28 contain tartrazine. Allergic reactions have been reported with the ingestion of this dye in some patients.) **ACUTE OVERDOSE.** Serious ill effects have not been reported following acute ingestion of large doses of oral contraceptives by young children. Overdosage may cause nausea, and withdrawal bleeding may occur in females.

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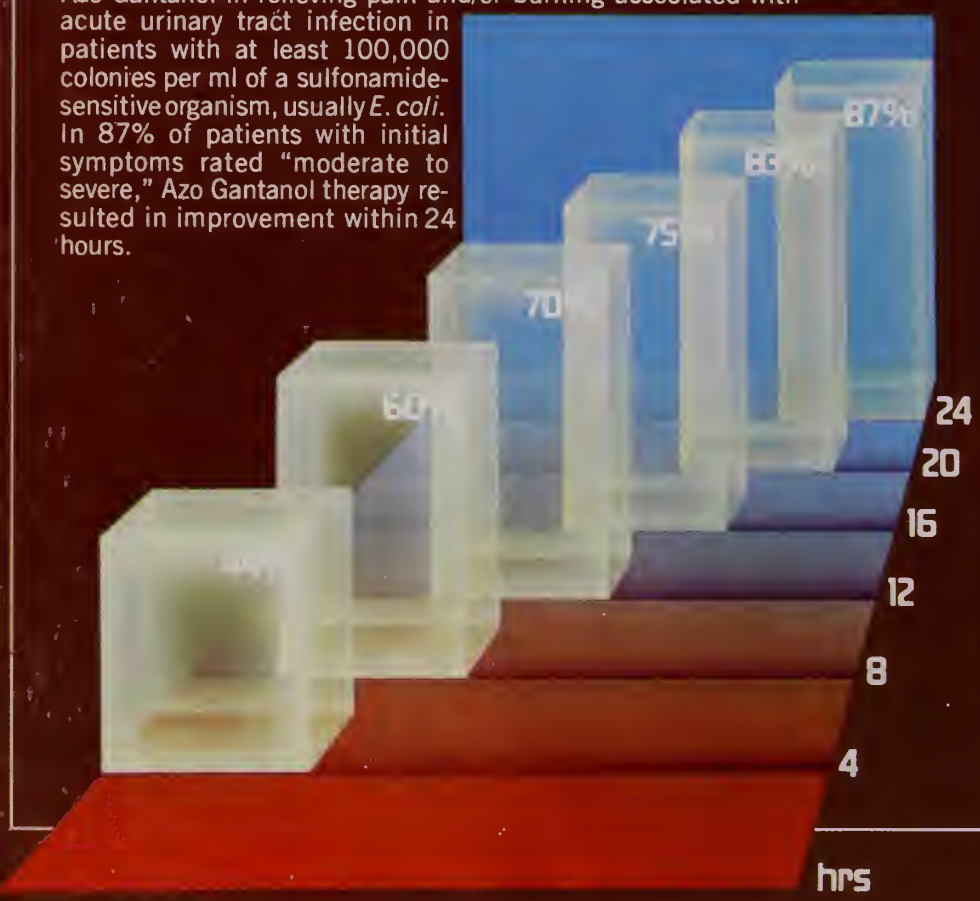
A controlled, multicenter study assessed the efficacy of Azo Gantanol in relieving pain and/or burning associated with acute urinary tract infection in patients with at least 100,000 colonies per ml of a sulfonamide-sensitive organism, usually *E. coli*. In 87% of patients with initial symptoms rated "moderate to severe," Azo Gantanol therapy resulted in improvement within 24 hours.

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*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey 07110.

**Before prescribing, please consult complete uct information, a summary of which follow**

**Indications:** In adults, urinary tract infectio complicated by pain (primarily pyelonephri pyelitis and cystitis) due to susceptible orga (usually *E. coli, Klebsiella-Aerobacter, Stap coccus aureus, Proteus mirabilis,* and, less quently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. Note fully coordinate *in vitro* sulfonamide sensiti tests with bacteriologic and clinical respon aminobenzoic acid to follow-up culture med increasing frequency of resistant organisms the usefulness of antibacterials including su fonamides. Measure sulfonamide blood leve variations may occur; 20 mg/100 ml should maximum total level.

**Contraindications:** Children below age 12; s fonamide hypersensitivity; pregnancy at ter during nursing period; because Azo Gantan tains phenazopyridine hydrochloride it is co dicated in glomerulonephritis, severe hepat uremia, and pyelonephritis of pregnancy wi disturbances.

**Warnings:** Safety during pregnancy not esta Deaths from hypersensitivity reactions, agra tosis, aplastic anemia and other blood dysc have been reported and early clinical signs throat, fever, pallor, purpura or jaundice) m dicate serious blood disorders. Frequent CB urinalysis with microscopic examination are ommended during sulfonamide therapy.

**Precautions:** Use cautiously in patients with paired renal or hepatic function, severe alle bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whe dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria stone formation.

**Adverse Reactions:** *Blood dyscrasias* (agran ulocytosis, aplastic anemia, thrombocytope leukopenia, hemolytic anemia, purpura, hy thrombinemia and methemoglobinemia); al *reactions* (erythema multiforme, skin erupti Stevens-Johnson syndrome, epidermal necr urticaria, serum sickness, pruritus, exfoliati dermatitis, anaphylactoid reactions, periorb edema, conjunctival and scleral injection, sensitization, arthralgia and allergic myocar *G.I. reactions* (nausea, emesis, abdominal hepatitis, diarrhea, anorexia, pancreatitis a stomatitis); *CNS reactions* (headache, peri neuritis, mental depression, convulsions, a hallucinations, tinnitus, vertigo and insomn *miscellaneous reactions* (drug fever, chills, nephrosis with oliguria and anuria, periarter nodosa and L. E. phenomenon). Due to ce chemical similarities with some goitrogens, uretics (acetazolamide, thiazides) and oral glycemic agents, sulfonamides have cause instances of goiter production, diuresis and glycemia. Cross-sensitivity with these agent exist.

**Dosage:** Azo Gantanol is intended for the a painful phase of urinary tract infections. Us *adult dosage:* 2 Gm (4 tabs) initially, then (2 tabs) B.I.D. for up to 3 days. If pain per causes other than infection should be soug After relief of pain has been obtained, cont treatment with Gantanol (sulfamethoxazole) be considered.

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# FROM THE EDITOR'S DESK

## PHYSICIAN LEGISLATORS

Three physicians have taken their seats in the new Florida Legislature. William G. Myers, M.D., of Hobe Sound, was elected to his first term in the House of Representatives on November 7. He joins veterans physician legislators Richard S. Hodes, M.D., of Tampa, FMA President-Elect; and David J. Lehman, M.D., of Hollywood, both also House members. The Legislature held a one-day special session in Tallahassee on December 6, primarily to deal with environmental matters.

## PHYSICIAN ADVERTISING

FMA is studying the ramifications of a ruling by a Federal Trade Commission Administrative Law Judge against the American Medical Association. The order charges AMA with restraining advertising and patient solicitation through the use of the Principles of Medical Ethics. The ruling goes to the full FTC. If it is upheld there, the AMA intends an aggressive challenge. The Administrative Law Judge's ruling would prevent professional organizations from setting guidelines for ethical conduct of their members without prior approval by the FTC. The FMA was not a party to the AMA case.

## STANDARD CLAIM FORM

Florida Insurance Commissioner Bill Gunter has refused to allow attachments to the standardized health insurance claim form required by an act of the 1977 Legislature. Gunter ruled on November 29 and no further delay in implementation was granted. Physicians not using the standard form after that date are not in compliance with the law.

## DISCIPLINARY ACTION

There was a six-fold increase in the number of disciplinary actions taken against physicians between 1971 and 1977. According to a survey of state medical disciplinary boards, 119 physicians in 1971 were the subjects of license revocations, narcotic permit suspensions, censure or denial of license reciprocity. In 1977, there were 685 such actions. Much of the increase is attributed to the increasing number of states providing immunity for persons making reports to the disciplinary boards.

## AMPAC TRACK RECORD

About three out of every four congressional candidates supported by the American Medical Political Action Committee (AMPAC) were successful in their 1978 races. AMPAC backed 367 candidates for the House of Representatives and 48 candidates for the Senate. The supported politicos were almost evenly divided between Republicans and Democrats.

## CONGRESS

The 95th Congress ended on October 15, 1978, leaving behind a mixed record on health legislation. Among measures passed sent to President Carter were: extensions of several public health programs; HMO amendments; extensions of community mental health centers and migrant and community health centers; and creation of a center for medical technology evaluation. Among major bills that failed to pass were: hospital cost containment; health planning amendments; Clinical Laboratory Improvement Act amendments; Child Health Assessment Program, drug legislation reform; changes to Medicare, Medicaid and PSROs; and Federal Trade Commission amendments.

## NATUROPATHS

The Fourth U.S. Circuit Court of Appeals has ruled that naturopaths have no constitutional right to be licensed by a state, and a state is not required to recognize naturopathy as a discipline distinct from licensed medical practice. The ruling came in suits filed by the Idaho Naturopathic Association against the Department of HEW and the states of South Carolina, North Carolina, Maryland and Wyoming. Florida stopped licensing naturopaths many years ago, and only a few remain in practice.

## CPT

A 17-minute film about the Physician's Current Procedural Terminology is available for viewing before physician groups and audiences involved or interested in the communication of medical procedures and services. The AMA's **CPT-4** is available on loan at no charge from the AMA, 535 North Dearborn Street, Chicago, Ill. 60610.

## DIAL ACCESS

The Southern Medical Association has inaugurated a new Dial Access Program on Arthritis and Rheumatism for Southern physicians. The service is available free of charge through a toll-free telephone line round the clock. A listing of tapes available may be obtained from the SMA, 2601 Highland Ave., Birmingham, Ala. 35205. The toll-free number is 1-800-633-4500.

## WORKMEN'S COMPENSATION

Last year, the Bureau of Workmen's Compensation began providing space on its claim forms for physicians to write in their usual and customary charges. However, only about 2% of the claims filed contain this information. Physicians are encouraged to make note of their usual and customary fees when filing WC claims so that FMA will have information to substantiate future requests for fee increases.

The Editor

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**Humor is an affirmation of dignity, a declaration of man's superiority to all that befalls him.**

**—Roman Gary**

# Dean's Page

## About Face

**Hollis G. Boren, M.D.**

The national effort to produce more physicians which was begun in the 1960's is now drawing to a close. HEW Secretary Joseph A. Califano, Jr., in his address to the Annual Meeting of the American Association of Medical Colleges spoke on four tenets of national policy in the health professions area. The first tenet is that: "Overall we face in the next decade an over-supply of doctors; unless we change direction we will seriously aggravate the over-supply by the end of this century." Thus, one of the key forces, the major commitment to increase the number of physicians, which has given us the best health care system in the world must now do an about face. Increases in class size of medical schools and the development of new medical schools were made possible largely by federal funds. Funds for construction of health facilities have already been reduced. Capitation funds to increase the number of medical students soon will be reduced and realigned for other incentives. The consequences of the Secretary's first tenet must be examined critically by our profession for both short and long term effects.

Only the most obvious predictions can be made at this time and they should be made while taking due account of Secretary Califano's other tenets of national health policy. These other three tenets are: ". . . we are producing too many medical specialists and sub-specialists . . ."; "The doctors we do have are seriously maldistributed in geographic terms"; and ". . . medical schools must take a more active role in making physicians responsive to demographic, social and economic changes which have deep implications for health care." Let us consider briefly only the consequences of the first tenet, realizing that there are many interactions between all four of the main principles.

From the standpoint of medical students, and eventual large reduction of their number may well lead to further increases of tuition, with greater debt burdens and an increase of payback in the National Health Service Corps. Indeed the Secretary envisions a maximal annual field strength of the Corps of 2,940 physicans to "satisfy 20 percent of the need for physicians in underserved areas." It should be noted also that large tuitions for medical schools work against one of our national goals of increasing the access to medical education to a broad socioeconomic group of applicants.

If the size of medical school classes eventually diminishes to a significant degree, there would be a corresponding reduction of the size of fulltime faculties of medical schools. Among other effects, such a reduction would diminish activities directed toward the production of new medical knowledge in a broad manner. There will be a considerable number of strategic and practical problems related to the mechanisms employed in accomplishing large reductions in the size of medical school classes.

With a reduction of the number of graduates from medical schools there would be a similar reduction of the number of first year residents, followed quickly by a reduction of residents at all levels. The quality of patient care would diminish accompanied by an increase in the cost of patient care. A greater loss will be the reduction in the pool of size and nature of the resident physicians from which comes the leadership of our profession. Once again a change of policy, this time a complete about face, may have a detrimental effect on the quality of patient care.

Dr. Boren is Director of the University of South Florida Medical Center and Dean of the College of Medicine, Tampa.

● Dr. Boren, University of South Florida, Tampa 33612.

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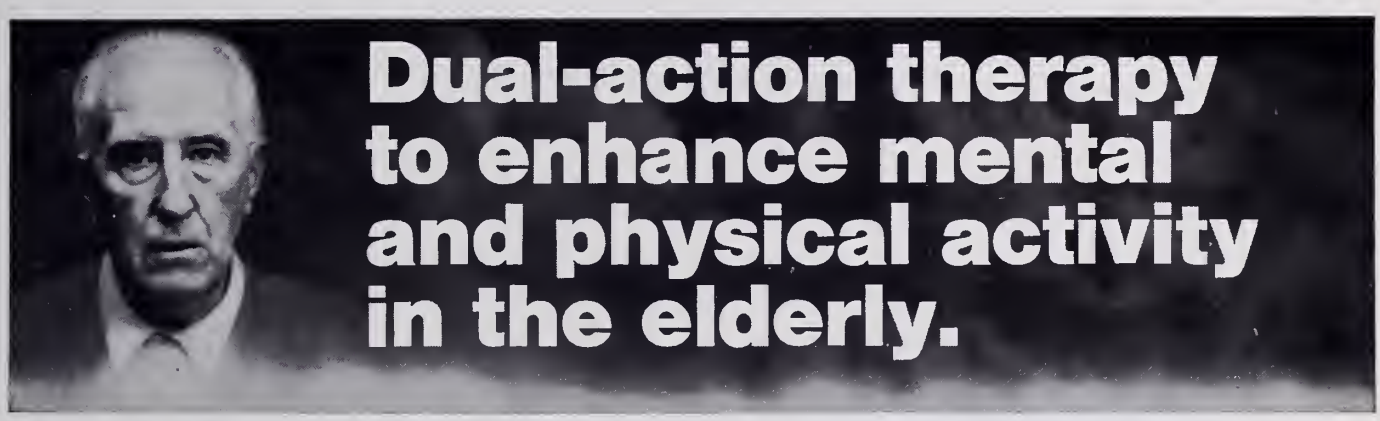


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# Special Issue Orthopaedic Surgery

## Introduction

James F. Richards Jr., M.D.

The term Orthopaedics was coined by Nicolas Andry in his 1741 volume entitled *L'Orthopedie*. The word Orthopaedics comes from the Greek meaning to "straighten the child." Orthopaedics is defined as "That medical specialty which includes the investigation, preservation, restoration and development of the form and function of the extremities, spine and associated structures by medical, surgical and physical methods."

It was not until this century that Orthopaedic Surgery blossomed into the medical specialty we know today. Its evolution has been relatively slow compared to surgery in general. Surgery of the bones and joints was made feasible only after significant refinement of aseptic technique. Every war has contributed to advances in the field of Orthopaedics. Even subspecialties of Orthopaedic Surgery have resulted from our experience in World War II.

Orthopaedics consists of the care of crippled and deformed children, including conditions that can be diagnosed in utero, as well as those disorders of attrition and senility at the end of life's span. The discipline includes the treatment of conditions that are congenital, traumatic, infectious, developmental, metabolic, neoplastic, degenerative and nutritional in origin. Children make up a significant part of Orthopaedic practice and treatment includes everything from mild shoe corrections and vitamins to the complex treatment of meningomyeloceles, scoliosis, osteogenesis imperfecta, bone and joint infections and, of course, the very frequent fractures and dislocations of the young. Orthopaedic Surgeons have traditionally contributed a great deal of time and effort in the care of children in specific programs such as Children's Medical Service of HRS, Elk's and Shriner's programs, and the Juvenile Amputee Clinic.

Orthopaedists also do a major portion of the Workmen's Compensation care in our state and, because of their involvement in trauma, frequently testify under oath in depositions or in court.

Orthopaedics is a gratifying as well as challenging specialty. Because of the great variation of problems that face the Orthopaedic Surgeon daily he is often forced to innovate or to improvise and at times deviate from "textbook norms" in order to accomplish his goal of treatment. The typical good Orthopaedic Surgeon is invariably a good mechanic and at times a skilled craftsman. He is usually one who uses his mind well in planning and his hands well in performing the task.

Dr. Richards

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Dr. Richards is President of the Florida Orthopedic Society.

The first Orthopaedic Surgeon to practice in Florida was Dr. Frank L. Fort who began in Jacksonville in 1924. The Florida Orthopaedic Society, founded in April 1947, boasts 334 members out of the 547 Orthopaedic Surgeons in the state. The total number of Florida members of the American Academy of Orthopaedic Surgeons, 420, is exceeded only by the 1,234 in California, 644 in New York and 425 in Texas.

Over the past 20 years, we have been exceedingly proud of the advances made in the field of Orthopaedics. In our lifetime, we have seen the near elimination of poliomyelitis so that those resources which were once devoted to the treatment of this disease are now devoted to care of birth defects and other conditions. We have observed significant improvement in the aseptic technique as well as better treatment of infections when they do occur as a result of traumatic contamination or hematogenous spread. We have witnessed the virtual elimination of surgical scoliosis in the state of Delaware and now, through the efforts of the Florida Orthopaedic Society, we are rapidly reaching that realization in the state of Florida using the technique of voluntary screening by Orthopaedists in the junior high schools. We have seen the development of new materials so that we now have acceptable high density polyethylene and methyl methacrylate permitting us to replace many joints of the body safely.

I see our role in the larger medical community as that of general practitioner of the musculoskeletal system. We are available so that our brothers in other disciplines can place upon us the responsibility for diagnosing and planning the care for those musculoskeletal complaints which patients may relay to doctors in any discipline. Although we sometimes recommend surgical procedures, we are physicians first and surgeons second and we much more often recommend nonsurgical treatment which can frequently be administered by the referring physician himself.

Orthopaedic Surgeons are generally a fairly happy lot who enjoy their work, who could not imagine doing anything else. They are typically "doers" involved in medical affairs inside and outside their specialty as well as in the affairs of the community. The Orthopaedic Surgeons of Florida are proud of their group and are anxious to be of service.

On behalf of the Orthopaedic Surgeons, we are pleased to present this review of Orthopaedic Surgery in Florida and thank the Editors of the Journal for this opportunity.

• Dr. Richards, 1315 South Orange Avenue, Orlando 32806.

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**In the game of life it's a good idea to have a few early losses, which relieves you of the pressure of trying to maintain an undefeated season.**

**Bill Vaughan**

# Special Issue On Orthopaedic Surgery

## Guest Editors

**Joseph C. Flynn, M.D. and Ronald J. Mann, M.D.**

## Editorial

The advances in the field of orthopaedic surgery in the last 10 to 15 years are striking. In this special orthopaedic issue of the Florida Medical Journal, we give the non-orthopaedist a look at what's new in our field, and what's happening among the orthopaedists of Florida. We hope this issue serves its purpose. As guest editors, we express our deep appreciation to the authors for their splendid cooperation. Our gratitude extends to the officers and members of the Florida Orthopedic Society for supporting and assisting us, to our secretaries who worked so diligently, to our contributors for their generosity, and lastly, to the editors of the JFMA, for the opportunity.

Dr. Mann

Dr. Flynn

# Development of Orthopaedic Surgery in Florida

Arthur H. Weiland, M.D.

Prior to 1920 orthopaedic surgery was considered an interesting subspecialty. While there were well recognized centers for training, these teaching facilities were located primarily in the larger cities of the Eastern seaboard and in established clinics. At the risk of being in error it is estimated that there were, at that time, no more than 30 cities in the entire United States where an orthopaedist was in residence.

Dr. Frank Fort was the first orthopaedist to locate in Florida. He received his M.D. degree from Georgia Medical College in 1920. After serving a residency at Bridgeport General Hospital in Massachusetts and Children's Hospital in Boston he became the Resident Orthopaedic Surgeon at the Shriner's Children's Hospital in Shreveport, Louisiana. He subsequently moved to Jacksonville, Florida in 1924 where he organized Hope Haven Hospital. When the Florida Crippled Children's Commission was established in 1929, he and I pioneered the work for crippled children in Florida. Later he became Medical Director. Dr. Fort's health was such that he had to move to a more suitable climate and chose Arizona; however, cardiac problems developed and he died in 1972. He was the first President of the Florida Orthopedic Society, a well-trained orthopaedist, a great gentleman, and a loyal friend.

I arrived in Miami on May 21, 1926, following orthopaedic training at the University of Illinois Medical School, Rush Medical College and Northwestern University Medical School.

Next to arrive in Florida was Dr. Prescott LeBreton who came to St. Petersburg in 1930. He had previously retired from practice in Buffalo, New York, but economic conditions in 1929 necessitated his return to the practice of orthopaedics. The newly established Florida Crippled Children's Commission gave him a ready opportunity to renew his profession.

Early in 1935 Dr. Eugene Jewett, a practicing orthopaedist, left New York City and located in Orlando. For many years he was Chairman of the National Employ-the-Handicapped Committee (NEH). He and his wife, Dr. Ruth Jewett, established a foundation to train young orthopaedic surgeons from Honduras, Central America, and Colombia, South America. Through it, the Jewett's have enabled a number of South American orthopaedists to get from one to four years advanced study in the United States. They have all returned to their native countries to carry on their work in orthopaedic surgery.

Dr. John Lovejoy Sr. was another orthopaedist who joined Dr. Fort in Jacksonville in 1935. He was a graduate of Duke University and received orthopaedic training at Shriner's Hospital in Springfield, Massachusetts and completed it at the Campbell Clinic in Memphis. It was my distinct pleasure to be associated with Dr. Lovejoy at the United States Naval Hospital in Jacksonville during the early part of World War II.

About 1937 Dr. Charles Burbacher became associated with me, and Dr. Ed Cullipher and Dr. Francis Glenn came to Miami. Dr. Paul Martin arrived in Jacksonville and joined Dr. Fort. Dr. Charles Mabry also came to Jacksonville. Dr. Herbert Virgin, who had previously located in Pensacola, transferred his practice to Miami during the war in 1942. At that time the majority of Miami orthopaedists had joined the Armed Forces. Dr. Herschel Cole arrived in Tampa in 1939. Although he was not certified, he was exceedingly well trained and was the only orthopaedist in Tampa for many years. Dr. Charles Farrington and Dr. Robert Lonergan joined Dr. LeBreton in St. Petersburg. Dr. Richard Walker settled in Orlando. Dr. Robert Keiser, after completing a residency at Children's Hospital and the Massachusetts General Hospital in Boston and a stint in the Army, joined Dr. Burbacher and me in practice in Miami in August 1945. Dr. Newton McCollough Sr. and Dr. Royston Miller began practice in Orlando shortly thereafter.

The number of orthopaedists in Florida increased from 10 at the end of World War II to 70 at the end of 1955. The number of certified orthopaedists had grown to 268 in 1975. At the present time there are 423 certified orthopaedists in our state.

In 1976 the applicants for membership in the American Academy of Orthopaedic Surgery from Florida exceeded the number in every other state with the exception of California. While Florida ranks eighth in

total population, with 8 million people plus, it is essentially equal to Texas in the number of certified orthopaedists, although the latter state has 4 million greater population. California and New York rank first and second, respectively, in both population and number of orthopaedists.

It is interesting that there are 31 cities in Florida with one resident orthopaedist and 13 cities with two. Overall there are 82 municipalities in Florida with certified orthopaedic surgeons. There are 97 practicing orthopaedic surgeons in the Miami-Dade County area alone.

Prior to 1947 orthopaedists in Florida met informally at FMA meetings. It was felt that a formal organization of the specialty group was needed. The initial meeting, suggested by Dr. Herbert Virgin was held at the Biscayne Bay Yacht Club in Miami on April 21, 1947. Thus, the Florida Orthopedic Society was formed. The pattern for the Society was two meetings annually; the Fall Meeting location to be at different cities in the state and the Spring Meeting to be held at the same location and time as the Florida Medical Association Annual Meeting.

The first orthopaedic residency training program in the state of Florida was begun in Miami at Jackson Memorial Hospital in 1934 by me. The traumatic and adult parts were well covered. Children's orthopaedics was provided by referrals from the Florida Crippled Children's Commission. However there was no basic science program. After Board inspection one year of certification was granted. In 1941 certification was increased to two and one-half years; in 1954 it was extended to the full three years.

The University of Miami School of Medicine was opened in 1954 and the Division of Orthopaedic Surgery remained under my supervision until 1957 when Dr. Wallace Miller was appointed as Chairman and Professor of the Division. In 1971 he was succeeded by Dr. Augusto Sarmiento who established the Department of Orthopaedics and Rehabilitation. Dr. Sarmiento remained head of this Department until 1978. In July 1978 Dr. Newton C. McCollough III was named Professor and Chairman.

The Department now consists of 10 full-time members, 24 residents, a Fellow in Hand Surgery, a Fellow in Rehabilitation and one biomedical engineer. The clinical programs are broadly based, well developed and include trauma, reconstructive surgery, hand surgery, rehabilitation, pediatric orthopaedics and spinal surgery. The primary teaching hospital for the Department is Jackson Memorial Hospital with additional resident rotations at the Veterans Administration Hospital and Variety Children's Hospital.

The Florida legislature established the College of Medicine at the University of Florida in Gainesville in 1956. The first class was graduated in 1960. The Shands Teaching Hospital was opened in 1958 and the Department of Orthopaedics, originally a Division of the General Surgical Department, was activated in 1960. In the ensuing 18 years, Orthopaedic Surgery has reached departmental status and a Chair of Orthopaedics has been established in the name of Dr. Eugene L. Jewett of Orlando through the Foundation by Drs. Gene and Ruth Jewett. The program now has eight full-time faculty and three full-time research faculty. The residency program accepts three residents a year for a total of 12. In addition residents from both the Orlando and Jacksonville programs rotate through for their basic science work. In 1970 there was established the W. Thaxton Springfield Center for orthopaedic study and research supported by private funds. An annual seminar in musculoskeletal pathology has been taught in the Center for the past 15 years for orthopaedic residents across the United States.

The orthopaedic training program in Orlando was initiated by Dr. Royston Miller in 1955. Originally it began as a children's residency program for one year but was expanded to a full four years in 1958 under the leadership of Dr. Newton McCollough. Two residents are accepted each year. The main teaching hospital is the Orlando Regional Medical Center (formerly Orange Memorial Hospital) coupled with the Harry-Anna Crippled Children's Hospital established in 1932 by the Elks of the state of Florida. The latter hospital has recently been replaced with a new 100 bed facility opened in 1977 to serve the children of Florida.

Various men have served as Chairman of the Department of Orthopaedic Surgery at Orange Memorial Hospital over the years that the residency program has existed. First was Dr. Newton McCollough followed by Dr. Royston Miller and Dr. Russell Willis (deceased), Dr. Joseph Matthews, Dr. Joseph Flynn, and now Dr. Raymond Gilmer. Dr. Jack Gresham served as the first Director of Orthopaedic Education in recent years and is succeeded now by Dr. Harry Tucker.

The program offers full training in adults, fractures and children's orthopaedic surgery. Added emphasis in training in scoliosis and other spinal deformities and rehabilitation, including spinal injuries and amputee work, both adult and children, are included in the training program. Active clinical and laboratory research programs cover various aspects of orthopaedic surgery.

A training program at Mount Sinai Hospital in Miami Beach in orthopaedic surgery was organized by Dr. Lester Russin in 1968. The present director of the program is Dr. Charles Weiss.

A training program was begun at the University of South Florida College of Medicine in 1972. The first professor of orthopaedic surgery and director of the program was Dr. Bernard Manale. He was succeeded by Dr. Merlin Anderson until 1978 and is now succeeded by Dr. Phillip Spiegel. This program utilizes several

hospitals: Veterans Administration Hospital in Tampa for adult orthopaedics and reconstruction, Tampa General Hospital for trauma and general orthopaedics, and All Children's Hospital in St. Petersburg for the children's phase. Two residents are accepted each year.

An important factor that has produced considerable interest in orthopaedic surgery in Florida is the work in the field of crippled children. The Florida Crippled Children's Commission was created by the state legislature in 1929. This empowered the Commission to establish various operating centers to provide for the examination, care and treatment of crippled children of indigent families. The state was divided into three centers, each staffed by one orthopaedic surgeon and a district nurse. These three centers were located in St. Petersburg, Jacksonville and Miami. Several years later additional units were created and each staff was enlarged to two orthopaedic surgeons, a physical therapist, pediatrician, nurse and a nurse's aide. This work increased tremendously over the years and by 1961 there were over 10,000 children under active care with every type of orthopaedic disability known. In the 1960's the Commission was abolished and the work now is being done through the Children's Medical Service under the Department of Health and Rehabilitative Services.

There were two children's hospitals built in Florida at about the same time. A hospital was built in Miami and named the South Florida Children's Hospital. It was opened on March 20, 1950 by Tent 33 of Variety Club International and since which time has been called Variety Children's Hospital. The training of orthopaedic residents began under the direction of Dr. Robert Keiser. During these years the hospital and the Department of Orthopaedic Surgery was accredited for one full year of training in children's orthopaedics. At about the same time that Variety Children's Hospital came into being, a crippled children's hospital was built in St. Petersburg. It was dedicated in 1950 under the name American Legion Hospital for Crippled Children.

The future of orthopaedics in our state is based on a combination of education, research and patient service. With the cooperation of the various training programs and practicing orthopaedic surgeons, we hope to maintain the continuing high standards as envisioned by our pioneers.

• Dr. Weiland, 5250 S. W. 105 Street, Miami 33165.

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## Mini-Sabbaticals in Orthopaedic Surgery

**The Department of Orthopaedics, College of Medicine, University of Florida offers mini-sabbaticals in Orthopaedic Surgery. Periods of study and clinical experience may be arranged in Rheumatology and Joint Replacement, Hand Surgery and Microvascular Surgery, Pediatric Orthopaedics, Sports Medicine, Tumor Surgery, General Orthopaedics, and Basic Science. Periods are available on the various rotations from one to four weeks. Participants will actively participate in the outpatient department, inpatient rounds, surgery and conferences. For further information contact: Dr. William F. Enneking, Chairman, Department of Orthopaedics, University of Florida College of Medicine, Gainesville, Florida.**

# Orthopaedic Education

## Demands and Trends

Merlin G. Anderson, M.D.

**Abstract: The Orthopaedic educational process enhances the achievement of a state of mind and being in which the surgeon both understands and utilizes the internal and external forces necessary to accomplish a functional end. The major purposes of education in orthopaedic surgery are the development of psychomotor skills, inculcation of a concept of patient rehabilitation, and an appreciation of a philosophy of humanism. Specific objectives in postgraduate training for the resident orthopaedic surgeon should include: development of an approach to problem solving, development of an on-going pattern of study, and continuing psychosocial growth with self-realization.**

We are often reminded that the practice of medicine is both a science and an art. Certainly this is epitomized in our field of orthopaedic surgery where streams of scientific data must be blended to yield a pleasing and functional result. Orthopaedic surgeons are artisans of the highest order performing their craft with imagination and feeling for both form and effect.

Can this art form and discipline be taught? What is happening in orthopaedic education today? Do you feel some responsibility for perpetuating your profession? Is there a key role to be upheld?

### Purpose of Orthopaedic Education

The purpose of orthopaedic education, as in every art form, is for the artisan to become one with his medium. Just as the painter must become one with his colors, the sculptor one with his marble; even so, the orthopaedic surgeon is at his best when one with his medium.

Dr. Anderson was Chief of Orthopaedic Surgery at the Veterans Administration Hospital, Tampa when this paper was prepared. He has since moved to Clearwater where he is looking forward to combining academics with private practice.

The orthopaedic educational process purports to enhance the achievement of a state of mind and being in which the surgeon is both expressing himself and fulfilling the needs of the patient. This educational process is successful when the learner understands and utilizes the internal and external forces necessary to accomplish the functional end.

Orthopaedic education has many ramifications: anatomy, biochemistry, physiology, biomechanics, electronics, metallurgy, genetics, behavioral sciences and many more. There are three major purposes of education in orthopaedic surgery which I would like to specifically mention: development of psychomotor skills, the concept of patient rehabilitation, and a philosophy of humanism.

#### Development of Psychomotor Skills

The technical aspects of orthopaedic surgery can be taught neither by precept nor by neglect! They must be "made by hand" by the surgeon in training! In years past those who aspired to our profession generally had natural inclinations toward the manual arts. Today, would-be orthopaedic surgeons may never have had their own tool box, planed down a plank, built a tree house, or chiseled out a mortise.

The array of orthopaedic instrumentation can be overwhelming. It ranges from the delicacies of microsurgery to the bulky reamers and drivers of intramedullary fixation; the technology and use of powered tools is constantly progressing.

The development of psychomotor skills cannot be left to chance; they must be specifically enumerated, encouraged, and experienced. In 1976 the American Academy of Orthopaedic Surgeons authorized a Psychomotor Skills Workshop and this year it will also be part of the Academy's Summer Institute. In their Bioskills Laboratory at the University of Washington, Fred Lippert has shown that individuals can acquire psychomotor skills and dexterity. I believe it is an essential purpose of orthopaedic education to aid and abet surgeons in developing "S-M-T": Smooth, Meticulous Technique.

Concept of Patient Rehabilitation

It has been said that the orthopaedic surgeon is best able to render complete care to the patient with disease or deformity of the musculoskeletal system because, from the very beginning, he has the end in view.

We are not technicians performing laminectomies and then referring the patients elsewhere because of low back pain. We are not amputation surgeons glorying in our survival rates while the prosthetist plays with "dog-ears." Surgery is but one point in a continuum. The patient, his family, and all members of the therapeutic team must realize that the miracle of surgery can only be sustained by their continuing efforts.

It therefore remains one of the vital purposes of orthopaedic education to transmit to the surgeon an appreciation of his role in the rehabilitation of each of his patients.

Humanism in Education

The third purpose of orthopaedic education which I wish to emphasize is "the making of a man." It is more vital that a resident mature and have a good self-image than many have admitted in the past.

The educational process covers a critical period of susceptibility during which life codes and patterns are set. Will the surgeon go forth to feed an insatiable ego? Or will he be prepared as a sensitive human for compassionate and consistent leadership? Of what worth is expertise without morality?

It has been too long that at the end of a residency we simply have given the man to society; we must now concentrate on giving society back to the man.

## Orthopaedic Educational Process

Historically the medical profession has suffered with conflicting identifications. Medieval associations between the healing arts and the church hung on for centuries, as witnessed in the medical trainee's state of penury. In the 19th century elements of tradesmanship were highly manifest in the preceptor relations. Now in recent years the educational emphasis has led to institutionalization and centralization.

We can be even more pointed in our tracing of the educational process. There was a time when orthopaedic education was at the feet of a few mentors. As our knowledge base broadened and the country's bureaucracies burgeoned, institutionalized preceptorships were spawned. Then controls became tighter and demands greater; now official blessing is more or less limited to "university connections."

Is it valid to assume that the University medical environment is the best or only training ground for orthopaedic surgeons? We salary young men and purport to relieve them of monetary concerns so they will study harder, but when do they learn the business of medicine? We excite youthful ideals with the adventure of research, but ignore immaturity in societal roles.

I am pleased, yes, proud, of the contributions which the American Academy of Orthopaedic Surgery has made to enhance the orthopaedic educational process. Their In-Service Training Examinations and Continuing Education Courses are outstanding and progressive. They have also emphasized training for educators and consequently the educational process of orthopaedic surgeons today is ever improving, reaching for the highest levels of learning.

It is embarrassing to think of my own years spent in so-called lower levels of learning; stupendous feats of memorization and rote application. How glad I am to now have appreciated higher levels in the cognitive and affective domains. How much more satisfying it is to train residents who can analyze, synthesize, and evaluate their own actions. How rewarding to watch the doubts and rebuttals being replaced by consistent and mature relationships.

Certainly it is well known that knowledge an individual gains for himself is more meaningful than knowledge which is simply handed over. We are all aware that education is not contained between the covers of a book or within ivy-covered walls. But what do you think: Is the orthopaedic educational process being trapped by educational empires, enslaved by medical bureaucracies subservient to federal and state funding schemes?

## Current Orthopaedic Educational Process

Orthopaedic education today is a highly sought after art form. This is especially true here in the United States of America where there are currently 180 training programs from which over 700 residents complete their training yearly.

In the state of Florida we have four major postgraduate training programs in orthopaedic surgery; over 60 residents with an output of about 15 annually.

It is difficult to know if we are training sufficient orthopaedic surgeons within the state of Florida to fill our own needs. Statistics lag years behind. The A M A lists 455 orthopaedic surgeons for Florida in 1973 while the 1976 Directory for the American Board of Orthopaedic Surgery has 480 names. Even if all orthopaedic surgeons who trained in this state were to remain here, it represents less than a 3% increase annually.

With approximately 500 practicing orthopaedic surgeons for a population of over 8 million Floridians, the ratio is 1:16,000. This implies about one orthopaedic surgeon per 30 medical doctors. These figures are

acceptable statistics for good patient care depending on the local distribution of services. Population growth for Florida in the early 1970's was in excess of 5% per annum but the last two years has seen a drop to less than 2% annually.

This raises the questions: Should training programs be limited by politics and tradition? Or should they be responsive to growth and management factors?

Academic Orthopaedic Process

What about academic orthopaedics? What of the scores of vacancies in teaching positions today? How will these manpower deficiencies affect orthopaedic education? The answer is: "negatively." Already many programs are unable to give the time and depth to their instructional and investigative efforts which are needed. Reasons for this predicament vary with places and personalities, but I do not believe it is for lack of interest or dedication among orthopaedic surgeons.

Orthopaedic education today is being victimized by educational empires, medical bureaucracies, and governmental funding schemes. With decreasing external funds for universities, medical schools, and departments, research and academic activities are curtailed. Orthopaedic surgery is viewed as a revenue center for hospitals and teaching institutions. Surgeries are performed under the guise of a teaching program but with questionable indications and minimal educational merit.

## Challenge of Orthopaedic Education

Fellow orthopaedic surgeons, we all share responsibility for the state of our profession and the perpetuation of what may be the most valuable art form today. We must make a specific effort to control our environment and not let the environment determine our actions. I believe that with determination we can balance the freedoms to think, inquire, doubt, and explore; yes, even against the confines of educational empires and prudent medical management.

In my own efforts to teach "would-be orthopaedic surgeons," I feel like a sculptor facing a marble block. I cannot shape a form without first conceptualizing it within my own mind; on the other hand no matter what my plans and desires may be they will be modified and yield to the texture and grain within the rock! I can only bring forth a sculpture based on my efforts using the unique strengths and weakness of each individual resident. I try to maintain perspective by recognizing three primary objectives.

First, I would hope that during a residency the postgraduate trainee would develop an approach to problem solving. This approach to problem solving should utilize all his knowledge and abilities, yield practical solutions, and allow him to seek help appropriately.

Secondly, during his residency the resident should develop a pattern of study which will continue to serve him throughout his professional life. This pattern of study should include a review as well as acquisition of knowledge; bioskills as well as data base.

Thirdly, by the completion of formal postgraduate training the orthopaedic chief resident should be on the brink of self-actualization. As teachers and role models, we should have guided him through the developmental levels of psychosocial needs to the pinnacle of "self-actualization."

We must remember that in training orthopaedic surgeons, we are, in fact, evolving very special people. Although the postgraduate trainee is well past his teen years, he has been caught in the prolonged adolescence of medical education. The resident is still highly motivated, his cognitive and affective programming susceptible, his value systems formative.

## Conclusions

If you were to ask: What is the key to the demands and trends of orthopaedic education today? I would clearly reply: Leadership! The spirit, character, and value systems of a leader determine that of his organization. I am very proud of our leadership and trust it will continue.

There is no easy answer; no one solution. Each program must solve its own problems but we all must cooperate and work together toward high standards and mutual professional goals.

It has been said that art is the highest expression of freedom. Certainly the trends in orthopaedic education today demand our cooperative and unceasing vigilance.

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**The unfortunate thing about this world is that good habits are so much easier to give up than bad ones.**

**Somerset Maugham**

# Joint Stiffness

Raymond E. Bellamy, M.D.

**Abstract: Practical facts related to office evaluation of "arthritis" or "stiff joints" are reviewed. Joint stiffness is usually secondary to impaired periarticular soft tissue mobility rather than to intrinsic joint surface abnormality. The duration of the stiffness is a helpful diagnostic clue. Serious joint disease results in loss of both active and passive range of motion. Discrepancy between active and passive range of motion implicates disease of the nerve-muscle-tendon unit.**

"Stiffness" or "arthritis" are complaints commonly heard by the practicing clinician. One needs a rational approach to objectively evaluate such symptoms. In an office setting, in most cases, laboratory tests are unnecessary and attention to a few clinical principles will allow appropriate diagnosis and management to proceed.

A. Joint stiffness in most instances is due to soft tissue periarticular immobility rather than to friction within the joint. Investigative study of friction in joints has demonstrated that type and amount of joint fluid lubricant and surface cartilage properties are far less important than the intermobility of the joint capsular structures, ligaments, tendons, bursae, and muscles surrounding the joint. Inability of these soft tissues to lengthen under tension is the usual cause of clinical joint stiffness.[1-3]

B. Morning stiffness is an important symptom relating information about periarticular soft tissue mobility. Characteristically patients with osteoarthritis or nonspecific musculoskeletal discomfort may note stiffness in the morning but ordinarily this subsides after 15 minutes or less of activity. The patient with rheumatoid arthritis, because of a different degree of synovial and periarticular involvement, may speak of two to four or more hours of morning stiffness, often also requiring aspirin or other anti-inflammatory medication to overcome. The length in hours may be as valuable an indication of rheumatoid arthritis disease activity and response to medication as the sedimentation rate or other signs. Again, the source of the stiffness is the soft tissue inflammation around the joint rather than any characteristic of the joint fluid or articular surface.

C. Actual loss of joint motion can be detected fairly rapidly by comparing joint mobility to the norm and to the opposite extremity. Significant loss of active and passive motion of the joint implies serious anatomic abnormality within the joint or its periarticular structures particularly if it persists. Septic arthritis is almost always accompanied by total loss of both active and passive motion of the joint during the active stages and attempts to move the joint passively produce severe pain. An x-ray examination, joint fluid analysis, and laboratory tests may be indicated for further evaluation.

D. Discrepancy between active and passive mobility of a joint implies impairment of the muscle-nerve-tendon unit controlling the joint but also implies a normal joint structure. For example, if the knee cannot be actively straightened but the examiner can passively do so, either the femoral nerve, quadriceps muscle, or patellar tendon must be at fault, but not the joint itself.

E. Roentgenography is ordinarily less important in evaluating the complaint of joint stiffness than the history and physical findings. Occasionally abnormalities of periarticular calcification or soft tissue swelling or effusion will give clues to periarticular disease causing joint stiffness. Weight bearing views, stress films, and arthrograms may yield additional information in specialized instances.

F. Laboratory tests are less helpful in the early stages of joint stiffness. An elevated sedimentation rate may help differentiate stiffness due to systemic inflammation from that due to overuse or mechanical abnormality. RA tests,

latex fixation, etc., are not ordinarily helpful in the early or marginal stages of disease. Serum uric acid is probably not a helpful determination in evaluating joint stiffness. A value for serum uric acid of less than 9.0 mg% will be only distracting, and without more concrete evidence of gouty arthritis, such as uric acid crystals in joint fluid and history suggestive of acute joint inflammation, that diagnosis is unlikely. Joint fluid analysis is most helpful in two specific instances — for culture of infectious organisms and to search for crystals.

G. Treatment of joint stiffness is aimed at the underlying cause of the periarticular tissue immobility. Aspirin or other anti-inflammatory medication, heat, and appropriate rehabilitative exercise benefit nonspecific joint stiffness. Excluding serious underlying cause is equally as important from the patient's point of view. The key to treatment of joint stiffness is an understanding of the etiology.

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# Book on Aerospace Medicine

The forthcoming publication of a book entitled "Man in Flight: Biomedical Achievements in Aerospace" has been announced by the Aerospace Medical Association.

The Volume was commissioned by the Association and will be published next May to coincide with the Association's 50th Anniversary. The work deals with the role of medicine and allied sciences in the success of manned flight from balloon ascents to space travel.

Information may be obtained by writing or calling the Association, Washington National Airport, Washington, D.C. 20001, (703) 892-2240.

# Advances and Treatment of Primary Bone Tumors

William F. Enneking, M.D.

**Abstract: In the past two decades, great strides have been made in the management of primary sarcomas of the musculoskeletal system. Advances have been made not only in terms of increased survival rates, but also in increased quality of life, preservation of limbs, and in increased functional capabilities. In this review, these changes are described in the three autonomous lesions: Osteosarcoma, Ewing's sarcoma, and chondrosarcoma.**

In the past 20 years great advances have been made in the treatment of primary malignant bone tumors. Two decades ago these tumors meant almost certain death in a short period of time but are now associated with ever increasing survival rates. Not only have survival rates increased dramatically but there has been a corresponding improvement in the quality of life for the survivors as a result of advances in the surgical reconstruction. The three commonest tumors that exemplify these changes are osteogenic sarcoma, chondrosarcoma, and Ewing's sarcoma.

## Osteogenic Sarcoma

This is a tumor of late childhood and early adolescence, (although it occasionally occurs as a complication of Paget's disease in adults). Twenty years ago the survival rates varied from 5% to 10%.[1] The treatment was amputation and it was almost routinely followed by a pulmonary metastasis within six to 12 months. With the advent of pulmonary tomography, smaller pulmonary metastases became visible—and thus resectable and the survival rates with amputation rose to 20%.[2] In the last 10 years adjunctive methods of treatment have come into play that have increased the survival rate. Most dramatically has been the use of chemotherapy to suppress the micrometastasis in the lung immediately after surgery for removal of the primary lesion.[3] The principle effective drugs have been Adriamycin and Methotrexate. These are administered usually in cycles of three to four weeks for one year postoperatively. The use of these drugs has raised the survival rate to approximately 50%. Whether or not this survival rate will persist indefinitely, or whether the drugs are simply suppressing the inevitable appearance of metastases, is not yet clear.

A second form of adjunctive treatment has been the use of immunotherapy.[4] It holds much promise and a great deal of investigative work has been accomplished. Survival rates with surgery plus immunotherapy are 40% (Fig. 1).

Radiation therapy, in the past, has been almost uniformly unsuccessful in controlling the primary tumor and/or preventing pulmonary metastases; however, in combination with chemotherapy, it frequently demonstrates a marked palliative effect, and it has been particularly useful in elderly patients whose tumors have arisen as a complication of Paget's disease.[5]

## Chondrosarcoma

Chondrosarcoma is a relatively low-grade malignancy that is most commonly seen during the middle decades of life, and frequently arises as a malignant degeneration of a preexisting, benign, childhood cartilaginous tumor. Although they have little propensity to metastasize, and previous survival rates after surgery have been around 60%, they have a great tendency to recur locally.[6] Since the majority of these tumors arise around the pelvis or the shoulder girdle, in the past, hemipelvectomy or forequarter amputation was a frequent consequence of these lesions. With the advent of successful total joint replacement, it has become increasingly possible to adequately remove the lesion without an amputation and to achieve a satisfactory reconstruction with the various combinations of bone grafts and prosthetic replacements.[7] A great deal of

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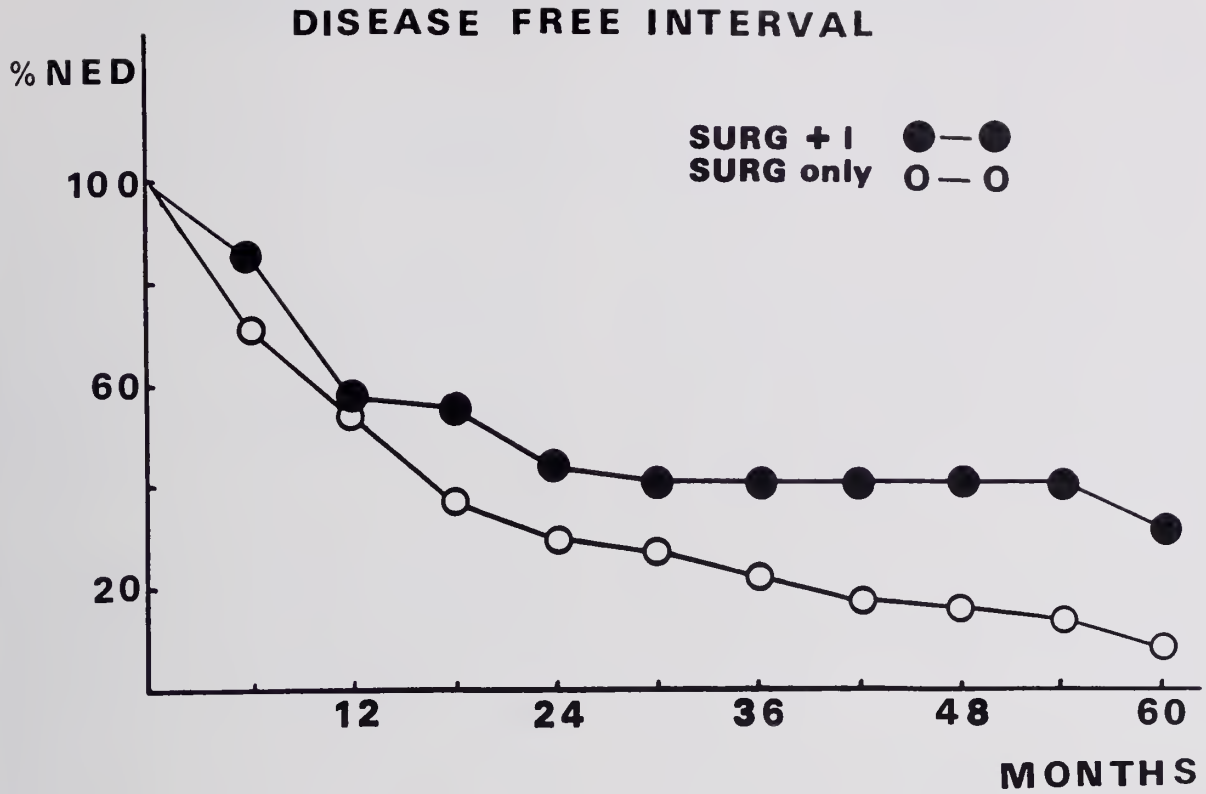


Fig. 1. — The dark circles represent the percentage of patients showing no evidence of disease (N.E.D.) who were managed by conventional surgical procedures (Surg) and adoptive immunotherapy (1) at the University of Florida. The white circles represent the percentage of patients N.E.D. managed by surgery only. The patients in both groups were matched by age, sex, site, and type of surgery.

current research is involved in improving methods of bone grafting, customized prosthetic replacements of bones and joints, and improved techniques in accurately outlining the extent of the tumor preoperatively to permit limb saving surgery. Recent advances in angiography, isotope scanning, and CAT scanning have been a great help in such procedures.

### Ewing's Sarcoma

Twenty years ago the survival rates of this highly lethal childhood tumor were very close to zero.[8] Traditionally, surgery has played little role in control of this lesion and palliation had been obtained primarily by radiation therapy. With the advent of systemic chemotherapy, the survival rates have now risen to about 50% using a combination of nonaggressive surgery, modern shrinking field techniques for whole bone radiation therapy, and multi-drug chemotherapy (Vincristine, Cytoxan, Adriamycin, and/or Methotrexate).[9] In addition to the increasing survival rates, the functional quality of limbs has vastly improved with the new radiation therapy techniques in the past two decades. As in other lesions, angiography, CAT scanning, and isotope scanning have greatly increased the ability to accurately plan and execute combinations of radiation therapy and surgery to preserve more functional extremities. Ewing's sarcoma of the pelvis and spine remains, however, a problem as survival rates in these anatomic sites remains very low, and current work and progress embrace a more radical surgical approach in combination with radiation therapy and chemotherapy.

### Common Soft-Tissue Sarcomas

Fibrosarcoma, malignant fibrous histiocytoma, synovioma, and rhabdomyosarcoma are seen mostly in the middle decades of life and commonly involve the proximal portions of the extremities, buttocks, and shoulder girdles. Treatment two decades ago was almost universally amputation and limb preserving local excision was accompanied by recurrence rates of 50% or more.[10] With the advent of soft tissue angiography, CAT scanning, and isotope scanning, the ability to preoperatively localize the lesion has improved tremendously. As a result the recurrence rate has decreased

with local resection to 5%.[11] In addition, modern radiotherapy has made possible a conservative palliative approach in more elderly patients with suppression of residual disease.[12] To date, chemotherapy has not played an important role in the soft-tissue sarcomas although currently a good deal of investigation is being carried on.

Many of the advances in the treatment of these tumors have been made possible by improved diagnostic techniques employing electron microscopy. Improved technology and expertise in frozen section diagnosis has helped to reduce the need for radical amputations. It has become abundantly evident in the past decade that each patient may require combinations of sophisticated diagnostic radiologic techniques, experienced pathologic expertise, judicious surgery, radiation therapy, and well-planned chemotherapy. In most instances these various modalities are used in a complementary fashion and interwoven in time.

As new knowledge has emerged from the basic laboratories and animal research, its clinical application and understanding have been greatly facilitated by the formation of cooperative clinical study groups. To rapidly and reliably judge the effectiveness of a potentially useful new modality in these relatively rare tumors requires pooling of experience through inter-institutional and interdisciplinary study groups. This is exemplified in our area by the Southeastern Oncology Group. For the interested reader, two excellent monographs reviewing this area have recently been published that draw together the expertise of the various disciplines.[13, 14]

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**One ounce of intelligence is worth a pound of education, for where there is intelligence, education will advance on its own, but where education alone exists, the results can be terrifying beyond the realm of untutored simplicity.**

**— Louis Bromfield**

# Autologous Blood Transfusions

Sanford A. Mullen, M.D.

**Abstract: The various techniques of autologous blood transfusions are discussed. The advantages and disadvantages are outlined. Many elective surgical patients and certain emergency surgical patients could be benefited by the use of autologous transfusions.**

Autologous blood transfusions are making a significant impact on the continuing effort to provide safe blood for elective surgical patients. All practicing surgeons should give careful consideration to the advantages of autologous blood transfusion. The proper use provides many benefits to the donor-patient.

This paper is prepared to serve as a brief summarization of the various techniques of autologous blood transfusions. For a more detailed consideration of this subject the reader is referred to the appropriate medical literature. Many of the comments in this presentation are based on the proceedings of a technical workshop presented at the 1976 meeting of the American Association of Blood Banks.[1] This workshop plus personal experience at the Jacksonville Blood Bank constitute the basis on which this report is prepared.

## Definition

It should be understood that an autologous transfusion is the transfusion of a recipient with blood products derived from his or her own blood. This technique is to be distinguished from homologous transfusions which are given to different individuals of the same species. Homologous transfusions constitute the overwhelming majority of blood transfusions being carried out today. The term, autotransfusions, is widely used to designate autologous transfusions.

## Historical Background

In the annals of medicine blood transfusion is a relative newcomer. The first reported homologous transfusions were carried out in dogs by Richard Lower in 1665.[2] In 1667, the blood of a lamb was given to a dying man who seemed to experience a transient improvement in his illness.[3] One of the interesting facts of medical history is the suggestion by William Highmore in England in 1874. Highmore proposed the first autologous transfusion. His comments are quoted as follows:

"It has since occurred to me that if I had at once collected the hemorrhagic blood of the woman, and defibrinated and warmed it to the proper temperature by my clinical thermometer over hot water, and injected it with my Higginson's syringe and transfusion-pipe, it would have all been the work of a few minutes, and the only chance of life the poor woman would have been afforded her."[4]

Since Dr. Highmore's suggestion, Landsteiner and his successors have provided detailed knowledge about blood types and the use of blood for transfusions. The first blood bank was opened in the United States in 1935 at Cook County Hospital in Chicago. The real impetus to blood banking came a few years later during World War II when the use of blood banking systems made great in roads into the morbidity and mortality of war wounds. Although most of the blood transfusions in World War II were by homologous technique, there were efforts at autologous procedures particularly intraoperatively. Since World War II blood banking techniques have been rapidly developing along many lines including autologous transfusion procedures.

There are two basic strategies for supplying autologous blood: either by predepositing it for future needs or acquiring it intraoperatively by hemodilution or salvage. The predeposit plans, of necessity, are restricted to elective surgical cases while the intraoperative techniques may be applied to both elective and emergency surgical cases.

## Advantages of Autologous Transfusions

There are numerous advantages to the use of autologous transfusions. Among the more important advantages are these:

1. Disease transmission risks are negligible. As long as proper attention is paid to the appropriate techniques and clerical procedures, particularly proper identification of units, there is virtually complete elimination of

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infection of the recipient by hepatitis, various viruses, malaria and syphilis.

2. Exposure to foreign antigens is eliminated. As is well known, except in the case of identical twins, each person's blood is probably unique with no two individuals having a precisely identical antigenic make-up. Because of this autologous transfusions provide a great advantage inasmuch as autologous blood eliminates any possible risks of sensitization to an antigen in the donor which is not present in the recipient.

3. The effects of established sensitization may be avoided. Those individuals who have been sensitized by previous transfusions or pregnancies or other factors will have no problem with blood from themselves.

4. Grouping and compatibility testing errors are eliminated. Although there is no absolutely perfect technique for eliminating clerical errors, there can be no error in the actual crossmatch since the blood is identical.

5. Overcoming certain religious objections to blood transfusions. The religious beliefs of certain individuals may prevent homologous blood transfusions but, in at least some instances, they do not prevent the use of autologous blood. It should be pointed out that certain religious orders do not accept even autologous transfusions, thus, all negative religious attitudes on this subject have not been overcome by the use of autologous transfusion.

6. Other reactions following transfusions. There are other reactions which can be avoided such as those to the soluble allergins which may cause urticaria and allergic responses. These are seen frequently in homologous transfusions. These and the rare graft versus host reaction are eliminated.

7. Conservation of donor resources. The use of autologous blood will help to preserve the supplies of blood in many blood banks.

8. Preoperative phlebotomies actually stimulate bone marrow production of erythrocytes. It has been established that the removal of several units of blood a short time prior to surgery will result in more efficient and a higher level of erythrocyte production. It should be noted that supplemental iron should be given in order to make the increased production effective. The already stimulated marrow will be more effective in replacing blood loss through surgery.

9. Improved rheology or blood flow dynamics. It is strange but true that there is an improvement in blood flow dynamics because tissue perfusion is improved. There is a more effective oxygen exchange system operating in the erythrocytes of a patient with a degree of anemia.

10. Blood is readily available if intraoperative salvage techniques are used in cases of massive trauma. This may be the only available means of providing the patient with erythrocytes if the patient has previously been sensitized to other antigens from homologous transfusions.

### Disadvantages of Autologous Transfusions

It should be pointed out that autologous transfusions do have certain inherent disadvantages. These should be mentioned so that one does not become unduly euphoric about the use of autologous transfusions.

1. Logistic problems. One of the most important considerations is the fact that the providing of autologous transfusions by a predeposit system provides a significant degree of logistic difficulty. It requires additional planning by the blood bank and transfusion service. It requires an interest and effort by the attending physician to see that the matter is carefully explained to the prospective autologous donor-patient and to his or her family. There is a degree of inconvenience for all concerned. The donor-patient may have to make several trips to the blood bank for the sake of donating blood well in advance of surgery. It is probable that a program of autologous transfusions may well add an additional cost to the transfusion although precise figures on this are not available.

2. Physiological problems for the donor. There is always a possibility that the removal of erythrocytes, with its resulting decrease in blood volume, may produce some problems for the donor-patient. Certain individuals have a labile blood pressure and experience syncopy following a blood donation even though they are otherwise perfectly healthy. It might also pose a problem for individuals whose work requires strenuous physical activity or involves hazardous duties such as flying or operating heavy equipment.

3. Occasional red cells damaged by freezing. It should be pointed out that among those individuals whose blood is to be prepared for autologous transfusion by freezing technique there are a small number of individuals with defective red blood cells which do not tolerate freezing very satisfactorily. Among these individuals are those with congenital spherocytosis or congenital hemolytic anemia, sicklecell anemia and other individuals whose red cells do not survive freezing. In order to avoid this problem, the freezing procedure could be tried on a unit of blood well ahead of time to determine whether or not freezing could be used in a particular donor-patient.

4. Technical problems in intraoperative salvage procedures. Intraoperative salvage of blood for return to the patient presents significant problems. A well-trained and competent team must be ready to perform the procedure whenever called on. Highly specialized equipment is needed.

## Intraoperative Autologous Transfusions

Intraoperative autologous transfusions have become more widely used in recent years. These are usually handled directly by the operating surgical team and an active transfusion service rather than the community blood bank. These procedures are conceptually easy to understand but there are, of course, technical difficulties in carrying out the procedures. These techniques may be used in both elective and emergency surgical cases. The two basic types of intraoperative autologous transfusions are outlined as follows:

1. Hemodilution. The first of these intraoperative techniques is hemodilution. This is actually an "intraoperative predeposit." This consists of the production of acute anemia by simultaneously withdrawing blood and replacing it with an appropriate volume of crystaloid (such as saline) or colloid (such as albumin) in quantities sufficient to maintain circulatory stability. Much of the work on this has been done at the Massachusetts General Hospital. Incidentally, it appears that this particular technique for autologous transfusions may be acceptable to certain religious groups which would not otherwise permit transfusions. The reports on this procedure are very encouraging but they are not yet widely accepted.

2. Salvage. The other technique for intraoperative autologous transfusions is by the salvage technique. In this procedure, the blood is recovered from an operative or trauma site and is then processed and transfused into the patient. This has been particularly useful in orthopedic surgery and neurosurgery and in ruptured ectopic pregnancy cases. The use of such a technique requires a well-trained and effective team of experts who can be mobilized promptly when needed. This is a rather complex procedure but one which is now being actively used in many centers. It will undoubtedly become more popular as the techniques for carrying it out are developed to a higher level of efficiency and effectiveness.

## Predeposit Procedures for Autologous Transfusions

This group of procedures has been used for the past three years at the Jacksonville Blood Bank. This is the variety of autologous transfusions in which a community blood bank can be most helpful. Of course, hospital blood banks and transfusion services can also use the same techniques. Most of the techniques for autologous elective deposit programs have only slight variation from established blood bank practice. Storage may be either in liquid or frozen form. Conventional methods enable liquid red blood cells to be stored up to 21 days.

1. Liquid storage. In using a liquid storage technique, it is possible to deposit up to four units of blood prior to surgery without using any special techniques. The first unit of blood is drawn 21 days prior to surgery, and then units are drawn at approximately five to seven day intervals up to two days prior to surgery. By this regimen, it would be possible to obtain four units of blood, although two would be older than 14 days. These older units may not be entirely desirable because, after about ten days, the blood begins to have serious depletion of the materials which enable it to exchange

In order to get around the problem of blood being relatively old several techniques of "leap frogging" have been developed. The basic concept of these techniques is that blood is withdrawn from an individual and then reinfused after a period of time with the withdrawal of additional units.

Dr. Jack Lubin and his colleagues in the Department of Pathology at Mt. Sinai Hospital in Miami Beach have been particularly active in developing this procedure. They reported their procedure in 1974.[5] In their report they described a technique for obtaining two to four units of fresh autologous whole blood and up to six units of autologous fresh-frozen plasma during a two to three week period immediately prior to surgery.

The Lubin technique, explained briefly, consists of "leap-frogging" blood in an individual donor-patient by removing, and then returning, a part of the deposit at periodic intervals prior to surgery, so that several units of blood and fresh frozen plasma can be available at the time of surgery. The details of this are explained in the article by Dr. Lubin.

The advantages of this technique are that it can be performed in virtually any blood bank and that there is no need for the capacity to freeze blood. It is a system that works very well if there is close cooperation among the attending physician, blood bank and donor-patient and his or her family. This technique requires dedication on the part of the donor-patient because the time involved is considerable and there are frequent sessions of removing and returning blood to the individual.

2. Frozen storage. The frozen storage technique for providing autologous transfusions is quite simple. The only special requirement for this procedure is that the blood bank have the capacity to freeze blood. This is the procedure which has been used for the past two years at the Jacksonville Blood Bank with no real problems. In this technique the donor-patient simply comes into the blood bank and has a unit of blood withdrawn. The red cells are then removed and frozen by standard technique and the plasma is frozen. This can be done as many times as required. An almost unlimited supply of blood can be obtained by this technique.

There are a few drawbacks with the frozen storage technique: (1) the donor-patient has to come to the blood bank on multiple occasions; (2) there is additional

expense; (3) there are certain patients whose red cells cannot be frozen; (4) there are certain logistic problems in providing blood by this method.

This technique has been very well received in Jacksonville. Not all donor-patients have lived in Jacksonville. Units of blood, drawn from donor-patients in outlying communities, have then been shipped to the Jacksonville Blood Bank for freezing for future surgery in Jacksonville.

### General Comments about Predeposit Plans

The predeposit plans are the ones which have been used most frequently at the Jacksonville Blood Bank. These plans have a real place for selected donor-patients. They are ideal for the elective patient who has time for arrangements to be made. They require close cooperation among the individuals concerned — doctor, attending physician and his staff, donor-patient and his or her family and blood bank staff. If any single link in this chain is not receptive to the idea, the plan is probably doomed to failure. There is no doubt that it takes extra time and that there is an additional expense.

One of the great and generally unlisted advantages in these predeposit plans is that the donor-patient has become very much involved in his or her future medical care. This is one of the strong plus factors in the consideration of this type procedure.

There are a few technicalities in these predeposit plans which must be kept in mind. The donor-patient must be started on iron when the program is instituted. It is highly important to get proper authorization from the donor-patient or, in the case of minors, from a parent or guardian. It must be agreed that the blood may be used for another person if the prospective autologous donor-patient does not use it for himself. It should also be pointed out that once frozen blood has been reconstituted for use, it must be transfused within 24 hours or it has to be discarded.

### Final Summary

The use of autologous blood transfusions has much to commend it. Various combinations of predepositing blood, using both liquid and frozen storage, together with hemodilution and intraoperative salvage, can be employed in order to provide autologous blood for elective surgical patients. Selected emergency surgical patients can benefit from hemodilution and/or intraoperative salvage.

The use of homologous blood transfusions would be greatly reduced if surgeons accepted the concept of autologous blood transfusions and used such blood whenever appropriate for both elective and emergency surgical patients. There is no safer blood but it does require close cooperation among all concerned. The immediate cost may be increased but it will eliminate for these donor-patients the terribly expensive and terribly unfortunate consequences of hepatitis and other diseases which cannot at this time be eliminated by another technique of transfusion.

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**The best argument is that which seems merely an explanation.**

**Dale Carnegie**

# Autologous Transfusions in Elderly Total Joint Replacement Patients

## A Review of Blood Replacement Methods

James L. Cain, M.D.

**Abstract: Autologous blood transfusions are being advocated increasingly in orthopedic surgery. This paper outlines some of the advantages, disadvantages and methods of autologous and homologous transfusions. The medical and legal aspects of homologous transfusions are discussed and a short review is presented of the history of the use of autologous transfusions and orthopedic surgery.**

**This study outlines our experience in a small community hospital involving about 28 outpatient preoperative phlebotomies in 23 elderly patients undergoing joint replacement surgery (total hip or total and unicompartmental knee replacements) over the past two years. The only requirements were that the patients be in good general health and that they have a hemoglobin of at least 11 grams at the time of the preoperative phlebotomy. Only one unit of blood was drawn preoperatively and no postphlebotomy iron replacement was used prior to surgery. The ages ranged from 56 to 81 with an average age of 72.**

**The main advantages of this program were: patients had a feeling that they were participating in their care, cost savings, the system permitted use of autologous blood during surgery with packed red cells postoperatively thereby reducing the amount of homologous whole blood used, and it reduced the risk of complications of homologous blood transfusions.**

Since the discovery of blood circulation by William Harvey in 1668, blood has become an important medical entity. The first authentic transfusion was performed in 1665 on dogs, and the first successful transfusions with human blood occurred in 1818 in England by Dr. James Blundell.[1] It is presently estimated that there are 8 million units of blood used annually which comes from about 3% of eligible donors.[2] These transfusions may be homologous or autologous.

Homologous transfusions require removal of blood from a fellow human being as a donor. The blood is collected in either an acid citrate dextrose solution or a citrate phosphate dextrose solution and can now be stored up to 35 days if it is kept at a continuous temperature between 1-6 degrees centigrade with a 2 degree centigrade range. The 35 day limit on banked blood has become possible increasing from 21 days because of the recent approval of a substantially different anticoagulant preservative solution CPD-adenine.[3] The blood may be stored as frozen red cells by using one of two techniques: low glycerol, high gylcerol. Both techniques require the cryoprotective agent glycerol to be washed out of the thawed red cells. By one of these latter methods the red cells may be preserved and stored for years.

The disadvantages of homologous blood transfusions are: disease transmission, blood reactions, immune reactions, expense, and legal aspects. The major diseases to be transmitted through blood transfusions are hepatitis, malaria, and syphilis. Because of this possibility since May 15, 1978, a new FDA regulation requires all containers of blood and blood products for transfusions to be prominently labeled either "paid donor" or "volunteer donor." The risk of acquiring post-transfusion hepatitis from paid donors is about 3-10 times that of volunteer donors.[4] It is known that the agent of infectious hepatitis as well as that of serum hepatitis can be transmitted by blood transfusion. Fatality from icteric hepatitis in adults approaches 10%, but the number of adults and children is unknown in whom the acute post-transfusion episode is unnoticed but who go on to have chronic liver disease.

In the past several years a factor called Australian antigen or the hepatitis B-antigen (HBAG) has been associated with hepatitis B. The antibody may be present in as high as 30% of the adult urban population suggesting that people may be exposed to hepatitis B-antigen by other methods than blood transfusions. It is known that all blood products of human origin may transfer hepatitis with the exception of immune serum globulin, plasma protein fraction and normal serum albumin. The latter products are heated to 60 degrees centigrade for 10 hours during manufacture, thus destroying the virus.[5]

Several types of transfusion reactions may occur to include immediate reactions such as those due to circulatory overload especially in infants and elderly people; plasma protein reaction resembling antiphylaxis; allergic reaction such as rash and fever; air embolism; gram negative sepsis from contaminated blood, and hemolytic reactions. The delayed reactions may be due to incompatibility of the blood transfused and can take the form of renal failure or immune phenomenon.

Charges for homologous blood require a replacement cost plus a cross-matching fee and an additional charge is made if the blood is actually received by the patient. The total cost of the unit of blood typed, matched and received is in the neighborhood of $60.

Another major disadvantage present in the medical atmosphere is from the standpoint of legal liability of transfused blood. The legal problems with homologous blood transfusions primarily center around these factors: use of the proper type, administration of the correct amount, obtaining consent, and prevention of disease transmission. Plaintiffs involved in litigation surrounding blood transfusions try to use the argument that since a charge is made for the blood that it is a commodity sold to the patient rather than a medical service rendered. Hence, the implied warranties of fitness and product liability have been used in such cases. Fortunately, thus far, this avenue of argument has not been upheld by the courts.

Obtaining the proper consent for transfusions may cause problems because the law presumes the patient, if given the choice, will refuse any therapy that is not medically-indicated and the physician who treats the patient without consent will be liable for all complications of the therapy. Certain religious beliefs and the emergency care of children can place the operating surgeon in extenuating circumstances regarding blood transfusions. It is generally felt that in cases of elective surgery that it should not be performed if there are limitations on the possibilities of blood replacement.[6]

Autologous transfusion is the removal of blood from the patient for his use at a later time. This is considered to be the only safe blood for transfusion. Considering only those blood factors for which tests can be performed (250) there is less than one in 100,000 chance of giving a person blood exactly like his own. Immunoassay for detection of hepatitis associated with surface antigens still detects at best only 30-50% of the donors capable of transmitting hepatitis. It is estimated that approximately 4-6% of the patients receiving transfusions have some type of adverse reactions, most of which can be eliminated by the use of autologous blood exclusively.[7] The advantages of autologous blood transfusion are: Children as well as senior citizens may be considered candidates for autologous transfusions. Pregnant patients may be ideal candidates if the pregnancy is uncomplicated. The hemoglobin concentration is the main limiting factor to be considered when a patient enters into the predeposit autologous program. If the autologous units collected are not used for one reason or another they can always be assigned for homologous transfusion if the donor's history permits. The legal risks are eliminated. The costs are reduced on the average of about $25 per unit of blood. The use of the patient's own whole blood will allow the use of homologous blood components at a later time in a nonemergency situation. The disadvantages of autologous transfusion is: The method can only be used for elective surgery. An adequate hemoglobin level is required. Good general health is necessary.

The autologous transfusion methods presently used are:

(1) Immediate preoperative phlebotomy with hemodilution which is primarily used in heart surgery. This is performed by infusion of a hemodiluent in one vein and simultaneous phlebotomy from another to produce a state of normovolemic anemia. This is done just prior to heparinization and before extracorporeal circulation. After surgery, the blood previously phlebotomized is reinfused to the patient. (2) Intraoperative autologous transfusions. This method uses the collection of blood from a cavity by various techniques and returning it to the circulation of the patient. Several methods have been used. The simplest method is to scoop up the blood; filter it, and citrate it; dilute it with saline and reinfuse it to the patient. The early attempts at this method resulted in mechanical trauma to the blood resulting in marked hemolysis. Presently the method being used requires a device called the Bently autotransfusion system. It consists of a disposable sterile reservoir filter and variable speed roller pump. Filtration is done by a nylon 125 micron mesh filter and two standard in line blood filters. Generally this method is used for the patient where blood loss is excessive from the operative procedure or in the severely traumatized patient requiring emergency surgery with large amounts of blood loss.

Success has been reported for the use of a continuous flow centrifuge device for autologous transfusions. In this method the extravasated blood and irrigating fluid are collected from the surgical wound and

passed into a centrifuge. The cellular components are washed and the plasma and wash fluid and the contaminants are discarded. Cellular components are resuspended to a desired hematocrit value with Ringer's lactate solution and returned to the patient's circulation. (3) Preoperative collection storage and reinfusion during or after surgery.[8] The same storage methods are available as for homologous blood. The lowest acceptable limit in these programs is a hemoglobin of at least 11 grams per 100 ml and an hematocrit reading of 34% prior to each donation.[9] Iron is the rate-limiting factor for hemopoesis following phlebotomy. It has been shown that by giving the patient therapeutic doses of ferrous gluconate 325 mg three times a day just prior to phlebotomy any where from 1-4 units of blood can safely be drawn within a three week period. In many cases less than 1 gram drop of hemoglobin is recorded during donations. The interval between donations and between the final donation and surgery can vary. The American Association of Blood Banks recommends that donations should be no more frequent than every four days. This would allow for collection of about five units of blood if they are to be stored in a conventional blood bank refrigerator, keeping in mind the 35 day outdating period for the blood stored in this manner. If time permits and facilities are available for freezing and deglycerolizing blood the time between collections can be extended and, of course, frozen red cells can be kept indefinitely. It is also possible that autologous units of blood that have been stored in the refrigerator and that will soon become outdated can be replaced by fresh blood units by a technique called "leap frogging." (A unit of blood drawn from the patient and the oldest unit is reinfused). This can be repeated and continued as long as necessary in order to maintain a relative fresh supply of whole blood.[10]

Grant, in 1921, used the first intentional preoperative drawing of blood for use at surgery.[11] He drew one pint of blood from a patient with polycythemia who was about to have a meningioma removed and returned the blood to the patient during the operation. Since this recorded episode it has been used sporadically in other types of surgery, but only recently has it been described in the orthopedic literature. In 1968 Turner recommended the use of autotransfusions for elective major orthopedic procedures. He felt that up to three units of blood could be safely phlebotomized at 2-6 day intervals and recommended prescribing oral iron between phlebotomies and for at least one month after phlebotomy. He reported on a series of 28 patients with 60 preoperative phlebotomies. The majority of the autotransfusions were used in patients undergoing posterior spine fusion of the transverse process type.[12]

In 1974 Cowell reported on 203 elective orthopedic procedures performed in 193 children and young adults participating in an autotransfusion program. These patients donated from 1-3 units of blood preoperatively. Again a large percentage of these patients were undergoing spine fusions of scoliosis.[13]

In 1976 Mallory and Kennedy described their results in 50 patients using this method in total hip replacement.[14] Their patients had an average age of 63 and donated 125 units of blood preoperatively. All but 30 demonstrated the ability to respond to oral iron and to maintain adequate hemoglobin levels for subsequent phlebotomies. No complications were encountered.

This study outlines my experience with a similar population of patients undergoing joint replacement surgery. Usually patients over the age of 65 are not considered good candidates for blood donors, merely because of the medications they are taking. Therefore, patients undergoing total joint replacements generally have to rely on homologous transfusions. Over the past two years 28 preoperative phlebotomies in 23 elderly patients were performed. The only requirements were that the patients be in good general health for the proposed surgery and that they have a hemoglobin of at least 11 grams at the time of the preoperative phlebotomy. Patients were then informed about the program to be used and were asked to sign a consent form. There were no weight or age limitations used and generally the phlebotomy took place at least seven days prior to the proposed surgery. Only one unit of blood was drawn preoperatively and no postphlebotomy iron replacement was used prior to surgery. The blood was stored under routine methods, and the ages of the patients ranged from 56 to 78 with an average age of 70. There were 24 total hip replacements and four total knee replacements. The reasons for surgery included one failed cup shaft arthroplasty, one failed Austin-Moore prosthesis, 18 for degenerative or osteoarthritis, three for avascular necrosis of the femoral head and one for a spontaneous arthrodesis of the hip secondary to a childhood injury. Knee surgery was performed in all four cases for osteoarthritis. The types of prothesis included one Charnley, 23 Aufranc-Turner and four geomedic total knees. The greater trochanter was osteotomized in two cases.

The average preoperative postphlebotomy hemoglobin level was 12.7 grams. The average postoperative lowest hemoglobin recorded during the hospital stay was 10.4 grams. The average discharge hemoglobin was 11.5 grams. There was a total of 54 units of blood used in the 28 procedures, of which 25 units were self-donated, autologous, leaving a total of 29 units of homologous blood used. Therefore, on the average one unit of homologous blood per patient was required. Three patients did not require any blood replacement, not even the autologous unit that had been drawn. This

blood, therefore, was available for general use in the laboratory. Seven patients used only their previously donated unit of blood but not requiring any homologous blood. As expected the patient with the shaft cup arthroplasty and the arthrodesis required seven and eight units of blood respectively. The anesthetic agents for the procedures varied as did the anesthesiologis Some of the procedures were done under continu epidural anesthesia and some under general anesthe with intubation. No attempt was made specifically achieve hypotensive anesthesia. Most of the patie were placed on an oral iron agent postoperatively wh was continued at home for at least one month.

There was one emotionally unstable patient who a syncopal episode during the phlebotomy after donat about 250 cc of blood. This phlebotomy was discontin and the patient is not included in this series bu mentioned because it was the only complication wit the entire study.

Even though this series is small it does corrobor the findings of other authors that elderly patients easily tolerate preoperative phlebotomy and autolog transfusions. The biggest advantage seen with t program was that it permitted the surgeon to repl blood volume intraoperatively with autologous bl allowing postoperative hemoglobin drops to be mana with hemologous packed cells, therefore greatly decre ing the potential for reactions. We have now exten this program to be used in young patients undergo other types of elective surgery where blood transfusions may be required such as spinal fusion, shoulde arthroplasty, and osteotomies of the femur Preoperative phlebotomy in the elderly patient i definitely safe, well tolerated and has contributed to cos savings.

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**Sometimes one pays most for the things one gets for nothing.**

**— Albert Einstein**

# Intraoperative Blood Salvage In Spinal Deformity Surgery In Children

Thomas A. Csencsitz, M.D., Ph.D., and Joseph C. Flynn, M.D.

**Abstract: Twenty-one elective spinal deformity surgeries were performed on 25 children participating in an intraoperative autologous transfusion program. A total of 11,125 cc of operative shed red blood cells with an approximate hematocrit of 55-65% was transfused to these patients. No complications except for transient hemoglobinuria were noted. The results of this study show that intraoperative autologous transfusion technique is a satisfactory and safe method of blood replacement, and complements preoperative phlebotomy in a program for total autologous blood replacement in children undergoing elective orthopaedic spinal procedures.**

Blood transfusions are required in many orthopaedic procedures in children, notably spinal deformity surgery. Homologous blood transfusions introduce the risk of disease transmission, isoimmunization and graft versus host reaction. Autologous blood transfusions eliminate the above risks.

The purpose of this paper is to report on an autologous transfusion program employing the technique of intraoperative autologous transfusion (IAT) used in a series of 26 elective spinal deformity procedures in children.

Autologous blood transfusion, although not a commonly used technique, is not a new concept.[1] An excellent review article on the subject is to be found in the Mayo Clinic Proceedings [2] and, as such, only pertinent facts on the subject will be detailed herein.

Certainly, autologous transfusion using preoperative phlebotomy techniques has proved highly successful.[3,4] Intraoperative autologous transfusion, when used, has been usually associated with trauma or cardiac surgery. Complications associated with IAT include hemoglobinemia, post-traumatic pulmonary insufficiency, disseminated intravascular coagulopathy (DIC), and air embolism. The pathomechanics of the above are not completely understood, but fundamentally are a function of salvage technique and physiologic reaction.

Although in theory it should be possible to meet all blood transfusion requirements using optimal preoperative phlebotomy techniques, in practice this is not feasible because of operative timing and unexpected blood loss. For these reasons, IAT is an attractive complementary approach to the preoperative phlebotomy transfusion technique.

This report is based on a study of 25 patients who participated in an IAT program at the Orlando Regional Medical Center between December 1977 and November 1978. Included in this study are all pediatric orthopaedic patients who received intraoperative autologous blood transfusions. This study constitutes a pilot feasibility study of IAT and techniques. Informed consent was obtained.

Excluded from this study are two additional pediatric cases in which intraoperative blood was salvaged but not transfused, as these patients did not require its replacement clinically. Also excluded are three adult orthopaedic procedures in which IAT was employed successfully without complications.

All patients who underwent preoperative phlebotomy received oral iron preparation preoperatively.

A Haemonetics Cell Saver System as shown in Figure 1 was employed. A technician thoroughly trained operated this system in concert with an anesthesiologist. The system is basically a small portable centrifuge whose input is a vacuum aspiration collecting system. In operation, operative field blood and debris are aspirated in the usual manner. A dilute heparin solution is mixed with the aspirant near the suction tip. This heparinized, crude aspirate is passed through a 140 micron filter, then roller pumped to a disposable bowl reservoir housed in the centrifuge. Centrifugal force separates from the red blood cells the waste products, including plasma,

**Fig. 1. — Cell Saver System in operation showing suction apparatus from operating field, primary filter, heparin and wash solution.**

hemolyzed red blood cells, heparin and other aspirated tissue cells and debris. When an approximate hematocrit of 55-65% is reached, red blood cells are washed with normal saline solution. The end product is essentially a unit of packed red blood cells which is then roller pumped into a blood bag without anticoagulant and transfused to the patient in the usual manner.

In practice, only 50-70% of the aspirated red blood cells are salvageable because of loss by hemolysis and centrifuge spill. Furthermore, because of the system design, approximately one litre of operative blood loss must be aspirated before 500 cc of packed red blood cells may be transfused. These facts necessitate replacement blood be made available preoperatively.

Preoperative workup generally included a complete blood count, blood coagulation studies including PT, PTT, and Lee-White clotting time, electrolytes, BUN, creatinine, arterial blood gases and chest roentgenograms. Pulmonary function studies generally were effected on patients with major scoliotic curves of greater than 50 degrees. An intravenous pyelogram and electrocardiogram were obtained when indicated clinically.

The patient profile is presented in Table 1 and the surgical procedures are presented in Table 2. Note is made that more procedures than reported were effected on these patients, however, the IAT program was employed only on those cases where the projected surgical blood loss was about 1,000 cc or greater.

In summary, 11,125 cc of operative shed red blood cells with a hematocrit of approximately 55% was transfused to the patients intraoperatively or in the recovery room. This represents a net savings of approximately 50 units of homologous and/or phlebotomy autologous blood. The least amount of IAT blood received by a patient was 250 cc and the greatest amount received was 1,350 cc. The average amount of IAT blood was 425 cc.

There were no major complications during the intra- or post-surgery period. Two patients experienced transient hemoglobinuria within the first 24 hour postoperative period. No rise in serum BUN or creatinine occurred. A third patient postoperatively demonstrated persistent bleeding at the incision site, associated with a normal PT, PTT, a prolonged Ivy bleeding time, and a low platelet count of 70K. This patient responded to whole

**Table 1. — Patient Profile**

| | |
|---|---|
| Patient Number | 25 |
| Surgical Procedures | 26 |
| Population Age at Operation | |
| Mean | 14 years, 6 months |
| | 10 years, 6 months |
| Extremes | 18 years, 11 months |
| Diagnoses | |
| Scoliosis | |
| Idiopathic | 14 |
| Congenital | 2 |
| Meningomyelocele | 2 |
| Cerebral palsy | 3 |
| Other | 1 |
| Kyphosis | |
| Meningomyelocele | 2 |
| Cerebral palsy | 1 |

**Table 2. — Surgical Procedures**

| Procedure | Number |
|---|---|
| Harrington instrumentation with posterior spinal fusion | 19 |
| In situ posterior spinal fusion | 2 |
| In situ anterior spinal intervertebral fusion with or without strut grafting | 3 |
| Kyphos resection with posterior instrumentation | 2 |

blood replacement. A workup for DIC was negative. Incidentally, this patient had marked bleeding intraoperatively and it is suspected a minor coagulopathy associated with normal coagulation screening tests. Further workup is to be effected.

This study demonstrates the feasibility of IAT in spinal surgery in children. It suggests further that in properly selected cases a combined program of preoperative phlebotomy and IAT will supply all transfusion requirements in elective spinal orthopaedic surgery.

As IAT returns to the patient only red blood cells, attention must be directed to other fluid and product replacement including coagulation factors and platelets.

IAT should be used cautiously and only with personnel trained in the system operation and its complications.

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**Tears speak more eloquently than ten thousand tongues.**
**They are messengers of overwhelming grief, of deep contrition and of unspeakable love.**

**— Washington Irving**

# Advances in Management of the Child Amputee

Joseph G. Matthews, M.D.

**Abstract: In the past few years there have been gradual but significant changes in the way a child or juvenile amputee is treated. The more conservative approach regarding surgical conversion, newer materials, newer components, the introduction and use of external power sources, myoelectric controls, special customized devices for activities of daily living such as eating, dressing and transportation have been developed. Modular systems of prosthetic components with considerable interchangeability are available. Now there is increased appreciation regarding the amputee's psychological problems relating to his deficiencies and the team concept for managing child amputees has demonstrated its usefulness.**

The term amputee, strictly speaking, should be applied only to the individual who has had a limb amputated or ablated and should not be applied to those who have been born with a limb missing. This condition is termed limb deficiency but for practical purposes the limb deficient child and the child amputee are handled the same. In most cases, it is desirable and possible to apply some prosthetic device to replace that portion of the limb missing.

In a limb deficient child, the physician must first decide if the remaining segment of that limb is useable for prosthetic replacement or whether it would be necessary to surgically change the shape or form of the limb remnant so that a well functioning prosthetic device could be applied and, in some cases, be more cosmetically acceptable. This surgical procedure is referred to as a conversion.

Years ago surgeons frequently performed conversion operations by removing considerable portions of the distal end of the remaining appendage. These operations were done early in life; unfortunately this method of treatment left many children with unnecessarily short stumps when they grew into adult life. Today the feeling is that when such conversions are carried out the operation should preserve the growth plates at the end of the long bones so as to assure that when adult life is reached they will have a long and useful stump. These conversions, therefore, are through the joints rather than above the joints.

During World War II and the years that followed, there was a marked increase in the interest in caring for amputees. There was a large number of returning veteran amputees and a growing demand for more useful and sophisticated limb replacements naturally followed. Around the country, certain medical centers devoted considerable study and attention to the problems of the amputee and prosthetic replacements. Much research was carried out in Los Angeles, Berkeley, Chicago, and New York, and as a result many prosthetic components in use today were not available before 1945. Research in these centers is continuing.

Because of the somewhat unique differences between child amputees and adult amputees, some centers devote their exclusive attention to the study and management of the child who is an amputee. Child amputee clinics were set-up in the early 50's and began intercommunicating in correspondence, trading ideas, comparing notes, seeking advice from each other and also engaging themselves in small research projects for the purpose of studying newer materials, newer components, and more modern principles of prosthetic management. From this early operation sprang an organization called Child Amputee Clinic Chiefs Association. This organization publishes a monthly periodical, "Inter-Clinic Information Bulletin," and has yearly get-togethers in the form of scientific meetings in various cities of North America. As a result a great deal of valuable up-to-date, sophisticated information is now being distributed to the Child Amputee Clinics around the country. This information is also disseminated to interested orthotists, prosthetists, physical therapists and occupational therapists, as well as orthopedic surgeons. Significant improvement in the way child amputees are being treated has resulted. These "participating clinics" occasionally have available monies from special grants to try out new devices or new materials at no charge to the patient.

## Advancements

Some child amputees do need some power source to work their new limb outside the body's own sources. This is particularly true in the severely, multihandicapped child that has bilateral involvement. These power sources are either electrical or compressed gas. Today, electricity is the usual power source of choice but still in some situations compressed air is used. Hydraulics have also been developed and are used in the newer prosthetic devices, particularly in lower extremity problems, and help substitute for some of the missing functions.

The severely involved child amputee, one that has several limbs absent, occasionally needs specially designed, nontypical devices to help in activities of daily living . . . special devices for eating, for dressing, and special transportation equipment to help them independently get from one place to another. Motorized carts are now available for the multihandicapped amputee to transport himself over reasonably flat surfaces. These often are customized with individualized controls for handling stopping, starting, accelerating, decelerating and turning. These carts are light-weight, portable and almost always battery-powered.

Materials used in modern prosthetics are constantly changing. Formerly artificial limb sockets were hand carved from hard wood such as willow but now most all sockets are fabricated with light plastic material formed over special molds to give a smooth total contact socket fit. These sockets are usually lighter in weight. Injection techniques using foamy plastic materials are now widely used. Some plastic sockets can even be made transparent, others can be made porous. Recently there has been developed an experimental leg made of very light but rigid foamy material, completely waterproof, that can be used for swimming or in situations where there is exposure to water and moisture that normally would cause damage to the conventional prostheses.

In the past several years, two new terms have entered the prosthetic glossary. One is endoskeletal type of artificial limbs and the other is exoskeletal. The endoskeletal type refers to a limb that makes use of a center core of hard, stiff, tough material for carrying the weight and bearing the stress. This center core is invariably a light metal pylon. To this pylon are attached the components such as ankle joints, knee joints, elbow joints, as well as the sockets. Covering the pylon is a pull-on cosmetic cover that results in a light weight, soft textured, cosmetically acceptable limb.

The exoskeletal type of prosthesis is the more standard form where the bulk of the weight and stresses are carried to the outer shell of the limb. Older style prostheses are of the exoskeletal type.

The advantages of the endoskeletal type are that the limb is more easily adjusted for alignment such as flexion, extension, abduction, adduction or rotation; easier to repair if damage occurs; lighter and cosmetically more acceptable. Interchangeability of stock components is also a strong advantage.

Another area of recent advancement is recognition of the importance of psychological factors in handling amputees, particularly child amputees. Studies have shown that acceptance or rejection of a prosthetic limb in a child is often influenced by minor and frequently insignificant little events. The Amputee Clinic Teams are very aware of these external stimuli and often rejection can be avoided by anticipating in advance those psychological problems before they occur. There have been books written on this subject and many seminars devoted to this very important aspect in the management of the child amputee.

The clinic setting itself frequently is a very helpful factor in acquainting the juvenile amputee and his parents with the fact that there are others who have similar or even more severe problems yet function well and often excel. The clinic team frequently encourages amputees and families to discuss their problems together. This is often of great benefit in decision making, particularly for the patient.

## Problems

The problems associated with management of the upper extremity amputee are considerably different than the problems of the lower extremity amputee. A child with one hand missing can still function very well using the sound side and the amputee stump as a helper. These patients often feel no need for replacement hand, arm or hook. Since a person can function much more efficiently with two hands, efforts are directed at creating hand replacements that will function better than a stump. Many functions can be reproduced such as push, hook, large grasp, small grasp, spherical pinch, and most of these can be accomplished with a terminal device called a hook. There are artificial hands that cosmetically look very much like a normal hand, complete with fingerprints, wrinkles, coloring, fingernails and so on, but hands never function as efficiently as a hook-type of terminal device.

In some amputees there are needs for special devices to be applied to the end of the prosthesis for special functions such as screw driver, hammer, wrench and so on. In children that wish to play baseball, a special terminal device consisting of a catcher's mitt can be screwed on to the end of the socket and functions very well.

A new and exciting technique of controlling external power sources is referred to as the myoelectric switching principle. By using implants in muscle, myoelectric signals can be picked up within the muscle belly of the stump, transmitted through the skin to a receiver in the prosthesis which then can be wired into the power system turning it off, turning it on, and controlling its strength. Myoelectric arms and hands are still in the research and development stage and are not yet perfected nor are they universally available, but in the near future they probably will be perfected and made available to selected amputees who need this type of function.

Those physicians who enjoy "seeking a better way" of doing things mechanically will find that the management of juvenile amputees is enjoyable, challenging, and gratifying.

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**Temperance puts wood on the fire, meal in the barrel, flour in the tub, money in the purse, credit in the country, contentment in the house, clothes on the children, vigor in the body, intelligence in the brain and spirit in the whole constitution.**

**— Benjamin Franklin**

# Rigid Stabilization of Fractures Using Adjunctive Methylmethacrylate

Joseph S. Mensch, M.D.

**Abstract: The addition of polymethylmethacrylate to internal fixation devices appears useful in stabilizing selected fractures secondary to a pathological process.**

**Pathological fractures secondary to metastatic carcinoma in the lower extremities are difficult to stabilize due to bone destruction. Methacrylate fills the void where neoplastic bone was present, thus allowing improved internal fixation device support. Elderly patients with intertrochanteric fractures frequently have severe comminution due to osteoporosis, the porotic bone in a broad sense being considered "pathologic." A clinical study of 15 patients with unstable intertrochanteric fractures indicated that methacrylate added to a standard Jewett nail allowed rigid stabilization.**

Rigid stabilization of fractures in the weight-bearing extremities has been a primary goal of orthopaedic surgeons. However, those fractures secondary to a neoplastic process or severe osteoporosis present unique challenges to the surgeon.

## Adjunctive Methacrylate in Neoplastic Fractures

Recently there has been an increase in pathological fractures in patients with disseminated cancer due to improved palliative management. Stable fixation of the weight-bearing extremities after fracture is necessary since approximately 40% can be expected to survive six months and 30% one year.[1] Nonoperative treatment of fractures occurring in weight-bearing long bones requires prolonged immobilization, which includes traction, and subsequent increase in morbidity to the patient. Although x-ray therapy can afford the patient some pain relief, fracture healing will be prolonged or even inhibited due to radiation necrosis of the fracture callus.[2,3]

Today, surgical internal fixation of pathological fractures has been accepted as a means of providing pain relief and better fixation, thus allowing a decrease in morbidity to the patient.

Conventional surgical fixation of a weight-bearing bone may take over six months for full consolidation and, therefore, the extremity must be protected from full weight bearing. However, frequently there is extensive destruction of bone present secondary to the neoplastic process and, therefore, secure immobilization is precluded by an internal fixation device alone. Recently, surgeons have added polymethylmethacrylate (PMMA) as an adjunct to conventional surgical devices to stabilize these pathological fractures.[4]

## Adjunctive Methacrylate in Osteoporotic Unstable Intertrochanteric Fractures

Elderly patients with severe osteoporosis frequently have severely comminuted intertrochanteric hip fractures. These fractures are classified as unstable if there are four or more major fragments (head-neck, greater trochanter, lesser trochanter and shaft). The soft porotic bone which can be considered in a broad sense "pathologic," plus the multiple fragments, presents difficulty in effective stabilization.

A significant incidence in loss of fixation and malunion has been reported utilizing accepted means of internal fixation.[5,6] Medial displacement osteotomy, combined with newer sliding and compression nails in order to allow the head and neck fragment better contact surface, still has a high rate of complications due to the nail cutting out of the soft porotic bone.[7] Few orthopaedic surgeons have not had a personal "experience" with this problem. The advancing age of our population, with our failure to effectively manage osteoporosis, has increased this fracture problem.

Recent clinical studies utilizing PMMA as an adjunct to surgical appliances appear to show a lower complication rate and more rigid stabilization in these patients.[8,9]

## Surgical Use of Polymethylmethacrylate

Methylmethacrylate is an acrylic polymer which polymerizes at room temperature by means of chemical activation of benzoyl peroxide. Widespread use of this material for intermedullary fixation of femoral head replacements was introduced by Charnley in 1958.[10] Subsequently Charnley and McKee and Watson Farrar used this material for skeletal fixation of components for their total hip replacements. Over 13 years of clinical and laboratory experience with this material has established there is a status of relatively safe biocompatibility and toxicity.[11] Biomechanical studies utilizing techniques which dynamically load a fracture that has been fixed with an internal fixation device plus PMMA has shown significant improvement in the strength of this bone acrylic internal fixation composite.[12]

## Surgical Technique

Surgical technique in those patients with pathological fractures must be tailored to the extent of bony destruction and the appropriate internal fixation device selection. Pathological fractures with large bone destruction have a high incidence of nonunion; therefore, the internal fixation device must be sufficiently strong with the added methylmethacrylate to prevent fatigue fracture. Standard surgical approaches are used and neoplastic bone is removed, thus leaving a wide void. One of two techniques then follows: the methylmethacrylate is inserted followed by the standard internal fixation device before the PMMA sets or if the surgical exposure allows, the internal fixation device is applied followed by methacrylate insertion. It is advisable to insert the PMMA along the entire span of the internal fixation device so that, hopefully, a composite structure can be developed throughout the length of the diseased bone (Figs. 1,2). Postoperative regimen is geared toward allowing the patient as much mobility as is tolerable. Frequently, these fractures are so stable that little or no pain is experienced by the patient. Radiation or chemotherapy can be started as soon as wound healing occurs, frequently as an outpatient, thus decreasing the in-hospital confinement.

In those patients with severe osteoporosis and unstable intertrochanteric fractures, the fracture is first reduced as anatomically as possible, using a standard fracture table with an image intensifier. The comminuted intramedullary porotic bone of the head, neck, intertrochanteric area, and adjacent femoral shaft is removed through a hole that has been made in the lateral shaft of the femur. This curetted bone is saved and later used as a bone graft along the medial cortex of the femur. Methylmethacrylate is then mixed and inserted into exposed medullary cavity of the neck, intertrochanteric area, and proximal shaft of the femur. The standard Jewett nail is then slipped over the preselected guide pin and the fracture is held in anatomical position as the PMMA sets. Screws are then drilled through the bone and the methacrylate in order to secure the side plate of the nail in place. Postoperatively, patients are allowed out of bed by the third day and allowed to ambulate, using a walker, weight bearing as tolerated on the affected extremity.

**Fig. 1. — Pathological fracture in 60-year-old female from metastatic breast carcinoma.**

## Clinical Study

Between October 1975 and June 1977, a study was performed to evaluate the effectiveness of the addition of PMMA in those patients with unstable intertrochanteric fractures plus severe osteoporosis. Fifteen patients were selected, all females with an average age of 80 years (range 61-92 years). All fractures exhibited severe osteoporosis as judged radiographically by thinning of cortex and widening of the medullary canals plus being classified as unstable with at least four major fragments.

Fig. 2. — Fracture stabilized with a nail plate device plus adjunctive methacrylate.

Fig. 4. — Six month postoperative A.P. radiograph.

Fig. 3. — 92-year-old female with comminuted unstable intertrochanteric fracture.

Fig. 5. — Frog lateral view indicating apparent periosteal bone crossing fracture site.

Nine patients had organic brain syndrome and were felt not to be able to follow a restrictive postoperative weight-bearing program with the therapist that is considered mandatory using conventional surgical appliances alone. Seven patients had previously been in congestive heart failure and two of our series had concomitant upper extremity fractures precluding effective use of a walker.

Follow-up averaged 13 months (range 4 to 24). X-rays showed no change in fracture position, no avascular necrosis and apparent periosteal bone crossing the fracture site by five months postoperatively. No intraoperative hypotension occurred during the PMMA insertion. No infections or hematomas were noted, but one patient did have a nonfatal pulmonary embolism that was successfully managed with heparin. All patients were ambulatory without evidence of a leg length discrepancy at follow-up (Figs. 3-5).

It appears from this study that the addition of methylmethacrylate to the standard Jewett nailing in these patients allowed a broad contact area between the head-neck and shaft fragments. Thus, stabilization was achieved so that immediate weight bearing could be instituted. The normal generous blood supply of the intertrochanteric area allowed ultimate periosteal healing without loss of fracture position.

Certainly this procedure should be limited to those patient classifications that I have indicated who perhaps could not have been managed using conventional techniques. The adjunctive use of PMMA may, therefore, be considered as a useful tool in the orthopaedist's armamentarium to manage these selected difficult cases.

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**The hero is one who kindles a great light in the world, who sets up blazing torches in the dark streets of life for men to see by. The saint is the man who walks through the dark paths of the world, himself a light.**

**— Felix Adler**

# Flexible Implant Surgery in the Hand

Ronald J. Mann, M.D.

**Abstract: Articular pathology due either to trauma, disabling arthritis or infection is as old as mankind. Restarting function to unstable, stiff or dislocated joints continues to be one of the most intriguing and difficult problems in reconstructive surgery of the upper extremity.**

The first recorded effort at treating the disease by simple resection of soft tissues and diseased bone was carried out by Ambroise Pare in the 16th century with the hope of avoiding amputation for incurable joint infection. This surgery was the birth of all future articular reconstructive surgery and of the specialty of orthopaedic surgery in the 18th century. It became popular in Europe and several papers on the subject were written ir the early 19th century. With the advent of anesthesia, surgical excision became more complete and refined and the principle of restarting function to a damaged joint by resection followed by postoperative rehabilitation and therapy of the parts in an attempt to develop a pseudoarthrosis was further developed.

Arthroplasty, or reconstruction of joints, was the logical sequence of the resection procedure. The problem was to interpose a buffered material between the articular surfaces to prevent bone healing. Adipose tissue was first used but soon discarded because it was found to quickly resorb.

Prior to 1900 surgeons in America, England and Europe inserted materials such as wood, gold, silver, zinc, tin and magnesium; synthetics such as cellulite, rubber sheets and collodion were also used. The use of fascia for joint reconstruction became popular because it eliminated the unpredictable effects of using heteroplastic or synthetic materials in living tissues.

The orthopaedic surgeons of the early 20th century further refined resection arthroplasty techniques. They used synthetic materials such as glass and bakelite and then in 1938 began to use the nonferrous alloy, vitallium.

In the past 15 years great advancements have been made in the treatment of arthritic and destroyed joints in the hand, especially rheumatoid arthritic deformities. Emphasis has been concentrated on the metacarpophalangeal joint. Surgeons excised the head of the metacarpal in attempting to complete the correction of the deformity by soft tissue surgery. Regular joint resection arthroplasty works well in the hands if the joint space and alignment can be maintained. Prior to the development of the flexible implant, excessive and prolonged postoperative fixation with pins and external support was frequently required. These devices, if overused, compromised the expected range of motion and over the long haul, in a number of these cases, the joints gradually narrowed and stiffness and subluxation could result. The unpredictable results that have followed simple resection arthroplasty in finger joint reconstruction have been a challenge for continued research.

A new era of research in joint reconstruction and replacement has been opened by the advent of medical grade synthetic polymers. In 1963 a silicone sponge and silicone roller was used as interpositional material to enhance resection arthroplasty. Medical grade silicone rubbers have been available since 1953 and since 1962 have been studied by Alfred Swanson, M.D., in Grand Rapids, Michigan.

These resulted in efforts to devise flexible implants for reconstructive surgery of the extremity. In 1966 Dr. Swanson reported his laboratory and patient experience with a flexible silicone rubber intramedullary stemed heat-molded finger-joint implant. In 1968 Nieubauer reported on the use of a silicone covered dacron hinge.

## Conclusion

The use of implants to improve the quality and predictability of resection arthroplasty in the hand is now a true principle. There is a growing interest in our society with its advancing medical technology and the replacement of destroyed autogenous parts by homogenous transplants in synthetic substitutes. The industrial development of medical grade materials suitable for use as synthetic replacements has opened up new horizons in reconstructive surgery. The physician and biological engineer utilizing these advancements have improved the prognosis of what were once considered irretrievable physical disabilities.

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# Joint Replacement in the Hand

Paul F. Wallace, M.D.

**Abstract: Joint replacement in the hand with silastic implants is a proven and well developed science with uniformly gratifying results. Replacements of IP joints, MP joints, carpal bones, wrist joints, distal end of the ulna, proximal end of the radius are feasible and used regularly.**

Various forms of joint implants for hands and elbows have been used for years with at least 10 years experience with silicone implants for finger joints popularized by Swanson. Of less popular usage is a Dacron type. Rigid types of metal with metal joints or plastic joints with cement implantation have not proved successful in hands but are used in elbows.

## Indications for Prostheses

The silastic implant is useful particularly in rheumatoid hands and for traumatic or osteo (degenerative arthritis). Implants are available for the entire elbow, radial head, distal end of the ulna, entire wrist joint, various carpals, MP joints of the fingers and thumbs, and PIP joints of the fingers. It is usually better to do a fusion in the MP joint of the thumb because stability and strength are important here over and above the motion that could be obtained. This joint normally only has 45 to 50 degrees flexion. Implants are never indicated in the DIP joints of the fingers or thumbs. Here, fusion is indicated. A completely stiff joint can be given motion. Many radial heads are treated by closed methods and end up appearing satisfactory by x-ray but leave the patient with pain and limitation of motion. At surgery it is frequently noted there is considerable loss of cartilagenous surface from both the radial head and the humerus and with the prosthesis in place the motion and pain are improved. Following fractures of the wrist with the frequently encountered shortening of the radius with disruption of the distal radial ulnar joint, an ulnar prosthesis gives a very satisfactory result with good function and motion.

## Types of Prostheses

The most successful operations are silastic implants for the MP joints in rheumatoid arthritis. There are severe deformities present with dislocation of the extensor tendons, ulnarward and volar dislocation of the phalanx under the metacarpal head most prominent. The joints can easily be corrected with silastic implants allowing for nearly full extension and sometimes up to 90 degrees flexion of the joint. Less successful are the PIP joints of the fingers, but will allow a range of motion from full extension to 75 to 80 degrees flexion with good stability. The radial head implant and implant for the distal end of the ulna are also uniformly successful giving a good range of motion, good stability and relief of pain. Full elbow prostheses and wrists prostheses are in the satisfactory range but are seldom spectacular in their results as are the others. Replacement of an avascular lunate with a prosthesis is a very satisfactory operation usually giving almost full range of motion with good stability and good strength. Replacement of the scaphoid is a little less successful, as for strength, range of motion and freedom of pain. Replacement of the multangular for chronic subluxation of the thumb metacarpal on the multangular does give good results, but all three of these implants are prone to occasional dislocation and occasional pain and incomplete motion.

## Surgical Methods and Procedures

In the rheumatoid hand there are frequently multiple deformities with muscle imbalance. Correction of the dislocated MP joint with the prosthesis will not correct a swan neck or boutonniere type deformity in which there is either a fixed hyperextension or hyperflexion deformity of the PIP joint with an opposite deformity in the DIP joint. These must be corrected before the prostheses are inserted in order to get tendons working and to promote the greatest improvement. Most of the prostheses are placed in the medullary canals of the adjacent bones for stability and eventually a sheath is made around the stem allowing the prosthesis to move back and forth in the canal with flexion and extension. This is not true in the ends of the ulna and the radius or the carpal bones where

Pre-operative hand of middle-aged female showing subluxation of the metacarpal joints due to rheumatoid arthritis.

Figure 1

Three years post-operative, with SILASTIC Finger Joint Implants, H.P. in place as adjuncts to resection arthroplasty. Also shown is a SILASTIC Ulnar Head Implant, H.P.

Figure 2

the prostheses are in a fixed position. The radial and ulnar prostheses are fixed in the intermedullary canal to hold the prosthesis in place. It can almost be promised that there will be a reduction in pain with the prostheses, and usually there is marked increase in the range of motion present. Along with the increased range of motion and reduction of pain comes progressive strength with increased use. It has always been known in hand surgery that a little improvement made a lot of difference in the use of a severely damaged hand. Very frequently a considerable amount of improvement occurs after prosthetic replacements.

It is my personal feeling that a wrist fusion, as a rule, is better than a total prosthesis, although there are many people who would dispute this. However, I feel that stability and reduction of pain outweigh what little you get with motion of the prosthesis. The DIP joints of the fingers do not respond to prostheses and when damaged are best fused in an extended position which gives good cosmetic and functional results. This also applies to the IP joint of the thumb.

Some juvenile arthritics and some adult arthritics have such small medullary canals that they cannot accept a prosthesis and it is inexcusable to operate on these when x-rays would disclose that a prosthesis could not be used. Although a prosthesis can be cut with a knife, this has to be done with the utmost caution and it increases the chances for a fracture of the prosthesis.

## Complications

If a prosthesis dislocates, it can be removed and after the wound heals it can be reinserted. It is not uncommon in finger prostheses when a dislocation occurs that the function still remains good and the prostheses can be removed and no later reinsertion be required. Common complications are hematomas with resultant poor wound healing and infections. There is some question as to whether antibiotics should be given preoperatively. The more rapid the operation the less chance there is for infection. There is probably little excuse for the insertion of four prostheses on one hand to take more than three hours with two hours a better figure. The use of a clean air room is still very conjectural and the laminar flow localizing types are presenting some problems with air eddies. Early swelling can be the result of an improperly applied compression dressing. Late swelling can be due to the inability to move the fingers or joints as required and can frequently be helped by a compression machine. A certain degree of stiffness occurs and it is necessary for early movement and the use of dynamic splints. For the most part movement should be started within four to five days and then repositioning and balancing should be carried out on the hand. Ulnar deviation of the fingers in a

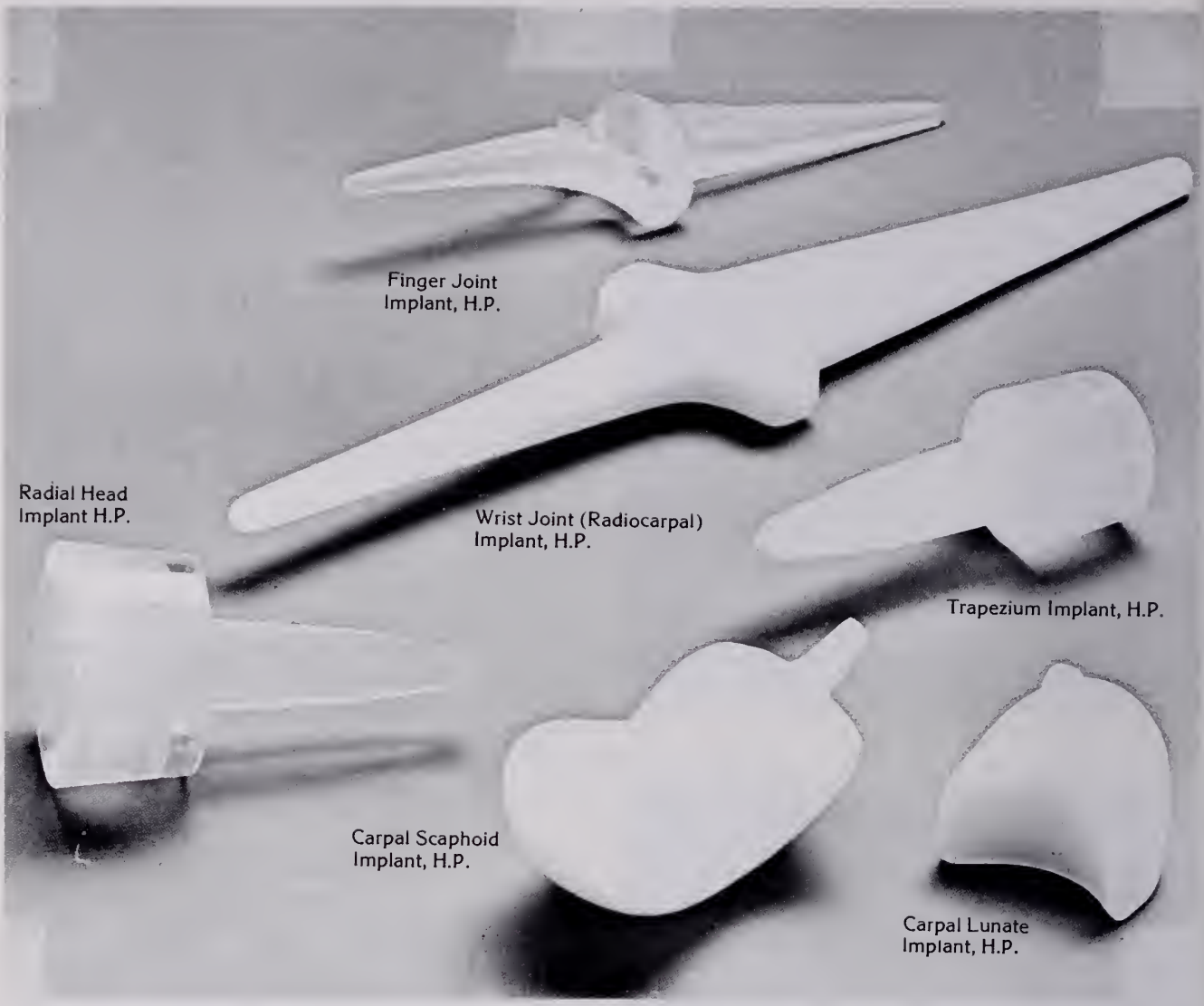


**Figure 3**

rheumatoid hand should be prevented by proper sectioning, transplanting, shortening and lengthening of tendons to balance the hand at surgery. Postoperative splinting is essential. Fractures of prostheses do occur but are not uncommon.

The proper selection of patient and prosthesis results in a happy improvement for all. There is nothing more beautiful than a grotesquely deformed rheumatoid hand transformed into a normal appearing and functional hand, nor the painless motion for the injured worker.

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**The only true gift is a portion of yourself.**

**— Ralph Waldo Emerson**

# Development of Microsurgery

Ronald J. Mann, M.D.

**Abstract: Microsurgery, the art of operating with the aid of a microscope, has found its place in many surgical specialties. For reconstructive or replantation surgeons, it serves as a method to transplant or salvage composite tissue by the anastomosis of blood vessels in the realm of 1 mm in diameter. Many techniques, instruments and procedures have been described for the union of small blood vessels without the use of magnification but it is my feeling that satisfactory, dependable repairs of 1 mm vessels cannot be achieved without its use. The degree of magnification varies from individual to individual; fortunately, the microscope permits the older surgeon to turn back the clock as far as eye function is concerned and continue to work with the use of full vision.**

Interest in microsurgery since 1960 has waxed and waned with the infusion and dissipation of new ideas and techniques. It has come to include peripheral nerve surgery where the microscope is used to improve fascicular repair. Since 1968 microsurgery has blossomed forth and now literally hundreds of human fingers, toes and flaps have been successfully replanted or transplanted. Many physicians have contributed to this slow development and rapid birth; some with ideas, others with early clinical efforts, still others with persistent animal experiments and finally a handful of aggressive and courageous clinical surgeons forced the technique into a world of clinical reality.

Harold Kleinert, a hand surgeon trained in vascular surgery, was one of the early workers in this country to appreciate the value of vascular repairs in the salvage of severe hand trauma cases. Other groups of surgeons were entering the field of microsurgery from a different direction. Millesi of Vienna working first with animals and then with human beings developed the "no tension" concept of nerve repair. This could only be achieved by the use of multiple autogenous nerve grafts carefully oriented under microscopy. The impact of this basic work is a story in itself.

Progress in microsurgery picked up as the supply of microsutures increased. A series of successful animal experiments pointed the way to the obvious clinical applications of digital replantations, digital transplantations and flap transplantations. There is probably not a major city left in the world where a successful digital replant has not been performed.

## Conclusion

It should now be apparent that there are many factors which need to be understood and requirements to be met in order to perform microsurgery with deft hands. Approximately 95% of failures in microvascular surgery are caused by technical errors; therefore, technical readiness and accurate work are the best assurances of successful anastomosis. The more thoroughly one comprehends the approach to microsurgery, the more efficient, creative and innovative one will be.

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**Genius is the ability to reduce the complicated to the simple.**

**C. W. Ceram**

# Status of Replantation in Florida

Davis S. Boling, M.D.

**Abstract: This paper covers a brief history of the development of microsurgery, its current status in Florida, and the present thinking about replantations, cases to be replanted, immediate care of the amputated specimen and the patient, and procedures to be followed in the interim until the replantation team is able to take over the patient. Obviously no list of the replantation teams can be listed in this paper but mention is made of areas where the procedures are done.**

Since the dawn of medicine man has been interested in replanting amputated extremities and digits. Only in recent years has he been successful in doing so. The pioneers, Jacobson and Suarez[1] in 1960, were the first to describe microvascular repairs. They gave us the techniques for success in replantations. The first successful arterial anastomosis of a one millimeter artery in a digit was reported by Kleinert and Casdan in 1965.[2] The first amputated arm was reported successfully replanted in Boston in 1962.[3] In 1965 two Japanese surgeons, Kamatsu and Tamai,[4] reported the first totally amputated thumb successfully replanted. Since that time, literature has become resplendent with many reports of replantations of amputated digits and extremities.[5-8] America, Australia, China, Germany and Japan all have numerous surgeons doing this work.

Interest has now focused on microvascular surgery. All subspecialties are benefiting from the techniques. The technique can be learned by effort on the part of the surgeons, but laboratory experience, practice, microscopes and special sutures are all required.

Not every hospital has the equipment and its availability is absolutely necessary for the surgery. The experience required for this is provided by fellowships and special courses in the United States and foreign countries. Laboratory work is essential for success in this field. Most of the fellowships now provide experience in clinical and laboratory work for microsurgical repairs. Curiously enough, the initial interest was in replantation of digits but now it has become evident that this is only the side benefit of microvascular techniques.[9,10]

Men have been trained by the pioneers in the field of microsurgery. As they finished their training they spread over the United States, and Florida has received its share of those specially trained.

In the past most amputated specimens from Florida were shipped out of the state to centers where this work was performed. It was then classified as experimental but no longer is so, and replantation of digits and extremities is no longer limited to these special centers in other states. There are men in Florida now capable of doing this work and it is being done here.

The problems of replantations, though, are not simple. Fatigue for the surgeon is a problem, particularly for the solo practitioner, because replantation may take hours and hours, particularly if multiple digits are involved. Availability for the solo practitioner is also a problem for constant availability is fatiguing and hardly possible. Mere logistics of this type surgery, therefore, would seem to indicate that the best result will come from more than one surgeon. This leads us to the team-approach in replantations.

Some individuals are better at the surgery than others and, as such, their success rate will be higher with equal selection of cases. Success rates in replantations may vary from 40% to 90% depending on the case selection and the series reported. At the present time there are teams being formed over the state. Miami has a team now at Jackson Memorial Hospital.[11] There are physicians in other cities including Jacksonville,[12] Gainesville,[13-15] Lakeland,[16] and Tampa who are doing replantations and no doubt there are those in other cities, unknown to me, who are capable of doing this type work.

Some suggestions for the ER physicians and family physicians are: First, I think emergency room physicians and family practitioners should seek out the closest hospital where replantations are done. Find out which hospital has an emergency room 24-hour duty, the microscope and the physicians who perform the surgery. Find the name of the physicians in that hospital who are capable of doing that work and who are interested in doing it. Put their telephone number and name down on a

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Dr. Boling is Clinical Professor of Surgery at the University of South Florida, Tampa, and also Hand Consultant for the VA Hospital.

Figure 1

Figure 2

list in the emergency room so that they are available. Have a backup team of physicians listed as well even if in another city. All amputations should be considered for replantation. Obviously, however, all are not suitable for replantation. The time limit for replantation varies. Some feel that a finger that is refrigerated can be replanted up to 24 hours.[14] For specimens with muscle in it, such as an arm or leg, the maximal time most will accept for replantation is six hours.

Now having made a decision that replantation attempt should be made several things should be done while you wait for the accepting surgeon to call. The amputated part should be placed in a plastic bag, such as a baggie, either with a moist sponge or at most a small amount of lactated Ringers to keep the amputated specimen moist, but not covered, and this baggie is placed in a second plastic bag containing ice. Do not put the ice in the bag with the amputated specimen. An alternative method would be to take the first plastic bag with the specimen in it and put it in an ice chest with ice surrounding it. Do not freeze. Do not perfuse the amputated specimen with any solutions. Do not clamp the arteries or veins in either the amputated specimen or the patient. Stop bleeding with even pressure. Give the patient antibiotics, something for pain and replace blood if needed while you are waiting the proper disposition of the patient. Do not leave the patient lying in the emergency room for hours waiting for someone to see them before starting the chain of events necessary to get the replantation done. If the patient is to be transferred elsewhere, make any arrangements as soon as possible because time is of the essence.

The above statements fairly well are agreed on by most of the men in Florida doing replantations. The staff at Jackson Memorial Hospital feel that basically these things should be carried out. In the actual procedure of replanting the digit, they feel that the important part is

Figure 3

shortening the digit, and this is generally agreed upon. If there is still tension of the vessel upon repair, then vein graft is inserted. They repair two veins for each artery and they repair the veins first. All of this is done under the microscope utilizing 10/0 sutures. The digit is K-wired to hold the bones in place and then the nerves, tendons and skin all are repaired.

Postoperatively, Dr. Mann[11] informs me, they continue with heparin and aspirin. Dry dressing is applied and the patient is not allowed to smoke or to be around anyone smoking. If the finger or digit loses vascularity, the patient is brought back to surgery.

The only single digit amputation that they are now replanting in Miami is that of the thumb. They feel that multiple digit replantations should be done with the index and middle fingers reapplied first, and then the ring and little finger, if time allows.

There is, of course, disagreement among various surgeons as to whether the single digit should be reapplied, but all agree that if the single digit is the thumb, then it should be replanted if at all possible.

Usually replantations are satisfactory. Amputations above the elbow are considered by some as being unworthy of replantation.[14] The thumbs are much better than we can create with a bone graft and flap. Multiple digit replantations usually give a better hand than a prosthetic one. As one moves up the arm, the results are less spectacular. The key of course, is good return of sensation, muscle function, and adequate circulation.

The final decision as to whether replantation is to be attempted should be made by the operating surgeon, family, and patient. The patient should be given the option of having the effort at replantation or not. The long anesthesia, expenses of surgery, hospitalization, and possibility of repeated anesthetics for revision of a clot must be considered. The decision is a joint one with adequate discussion ahead of time and should be considered as such.

In summary, replantations are with us, and I think that the patient should be given the opportunity, if desired.

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**Leadership is as much a matter of destination as it is of strength and magnetism.**

**Leslie Cornell**

# What's Happened to the Wrist in the Past Ten Years?

Francis M. Howard, M.D.

**Abstract: Ten years ago carpal fractures and dislocations were a jumble of kaleidoscopic complexities. During this decade a long forgotten French classic of anatomy and roentgenology was found again. The computer and high speed cine films have stimulated biomechanical laboratories throughout the country to analyze, separate, and classify these injuries into precise anatomical entities which permits a rational plan of management.**

The revival of an obscure French classic in carpal anatomy, a biomechanical laboratory amidst the corn fields of Iowa, use of silastic implants from a Michigan chemical manufacturer, and development of the operating room microscope have contributed to an understanding of the wrist, its function in health and disease in the past ten years.

Ten years ago carpal injuries were a hodgepodge of seemingly unrelated fracture-dislocations, reimplantation of severed hands was largely futile, prosthetic replacement of carpals and total wrist implants were in their infancy, and nerve repairs often resulted in painful, deadend neuroma.

Today, almost all hand surgeons use magnification or microsurgical techniques when repairing nerves — better function is the result. Reimplantation of amputation through the wrist no longer makes headlines; the use of silastic scaphoid (Fig. 1), or lunate implants (Fig. 2), has often obviated wrist arthrodesis. The rediscovery of a Destot's anatomical classic[1] has unlocked some of the mysteries of carpal fracture — dislocation; the use of trispiral tomography has penetrated the radiographic nuances that have questioned whether a fracture had healed. The biomechanical studies of the wrist at the University of Iowa and other laboratories have opened the door to a basic understanding of the kinematics of carpal, metacarpal, and forearm relationships.

## I Biomechanics

Youm, McMurty, Flatt and Gillespie have confirmed that a fixed axis of carpal motion centers about the stable, unyielding capitate.[2] They have further demonstrated that radiocarpal and intercarpal joints contribute to all phases of wrist extension as well as wrist flexion. Other bioengineering laboratories have laid the foundation for the rapid and spectacular improvement in joint replacement surgery in the last decade.

Laboratory data collected by Mayfield, who has reproduced carpal fractures and dislocations, have further clarified the seeming maze of injuries.[3]

## II Carpal Fracture — Dislocations

The clinical investigations of Dobyns, Johnson, Howard and others have demonstrated that subluxation of the scaphoid (Figs. 3 and 4), lunate dislocation, perilunate dislocation, and trans-scaphoid perilunate fracture dislocation are inter-related injuries. Formerly construed as disparate, unrelated entities, these fracture dislocations can be classified as one package differing only by the force applied at the time of the injury. The work of Taleisnik and the revival of Destot's classic have demonstrated that the strength of ligament stability is found in the volar ligaments, yet these same ligaments contribute to the pathomechanics of carpal fracture and dislocations.

With a better understanding of the biomechanics of wrist function, the complexities of wrist injuries can be identified and a logical method of treatment devised. The wrist must work as a stabilizing force to enable the hand to function properly. The wrist must function as a series of links with the scaphoid being the bridge or the intercalated linkage. Link systems tend to collapse into a Z-configuration when disruption occurs; this causes carpal instability as the scaphoid dislocates or becomes unstable (Fig. 5). When the force of injury continues, the entire carpus may become unstable, characterized by the telltale volar fracture of the triquetrum.

Scaphoid fractures comprise 80% of carpal fractures. Two factors determine whether this fracture will heal: blood supply and stability of the fracture.

Tuberosity fracture fragments carry an abundant blood supply. Diagnosis by quality x-ray technique permits treatment by cast immobilization for four weeks with excellent results.

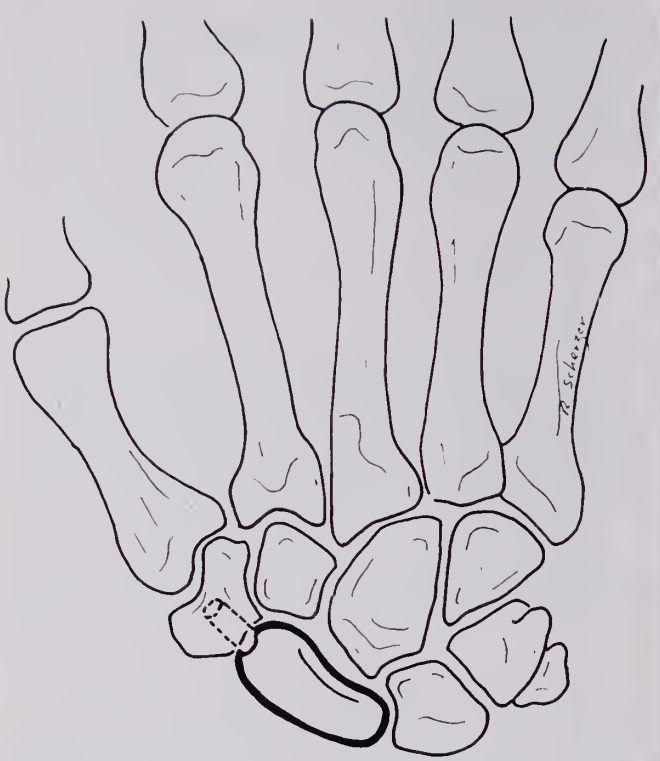

Fig. 1. — Silastic implant for scaphoid replacement.

Fig. 3. — Rotatory subluxation of scaphoid showing gap between scaphoid-lunate.

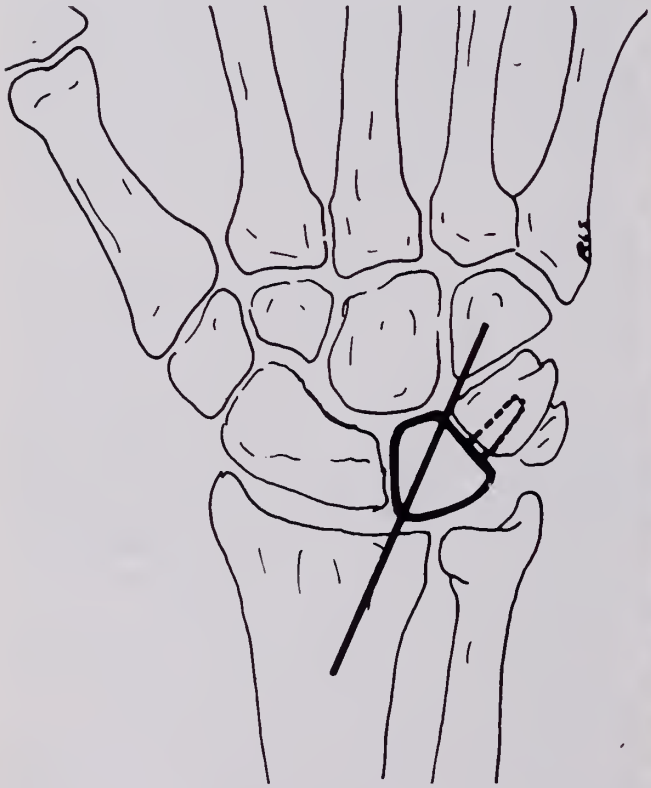

Fig. 2. — Silastic implant for lunate replacement.

Fig. 4. — Proximal pole of scaphoid during excessive rotation.

**Fig. 5. — Advanced degenerative arthritis of wrist showing scaphoid-lunate gap with capitate attempting to penetrate this space.**

Most fractures of the scaphoid occur in the middle third or the waist of this carpus. Here, anatomical variations in the blood supply can result in pseudoarthrosis at the fracture site or avascular necrosis of the proximal fragment. Here also the fracture may be unstable due to stress forces caused by the original injury. An unstable fracture characterized by displacement, malrotation, or a large gap may require an open reduction with internal fixation. A stable fracture with a horizontal stress line requires cast immobilization for at least eight weeks. The cast incorporating the thumb is molded in gentle flexion and slight radial deviation of the wrist.

A fracture of the proximal third of the scaphoid occurs in about 15% of these fractures. It can be easily overlooked in radiological interpretation. Despite prompt diagnosis and treatment a high incidence of nonunion can occur.

Nonunion of a fracture of the scaphoid can be diagnosed after six months if no bone trabeculations are visible across the fractured fragments. A bone graft using the volar approach with the method of Matti-Russe where both fragments are curetted and packed with a cancellous peg of iliac bone and bone chips have given 97% union in a large series.[7,8]

"The Sprained Wrist"

A specific understanding of the pathomechanics of the wrist injury is the key to treatment and prognosis. If a "sprained wrist" fails to respond to immobilization of three weeks, time enough for a stretched or torn ligament to repair, a diligent diagnostic search is indicated. A disparity between the patient's complaints, swelling, and negative x-rays should alert the physician to search more thoroughly.

Almost all carpal and joints of the wrist can be palpated as well as many tendons, vessels and nerves. Testing wrist laxity by moving the carpals in a dorsal-volar plane or a radioulnar plane may establish wrist instability or scaphoid subluxation.

Radiograms of excellent quality are a *sine qua non.* Multiple views, comparison views of the opposite wrist, and specific views may uncover the small line of condensation or radiolucency that will unmask a fracture. A change in the angle, as in an oblique view of the ulnar-deviated wrist in supination, can outline the scaphoid. Dynamic compression views of the wrist, views of the wrist in supination, rather than the routine AP view with the wrist pronated, may establish a diagnosis.

Specific identification of sprain patterns should be sought. An injury causing forced extension of the wrist will often cause a compression with impingement on the dorsal wrist structures. Conversely, with forced wrist flexion, tension stresses occur to the volar structures. Torque forces when the hand is caught in a spinning steering wheel can result in rotational sprains.

The forty-five degree, supination oblique view can show a fracture of the hook of the hamate that may be due to a forgotten dubbed golf shot (Fig. 6), a painful push-up, or a missed tennis stroke in the past. The motor branch of the ulnar nerve is often injured in this fracture.

## III Implants

Implants for individual carpal bones have now given fairly predictable and satisfactory results in replacement treatment. The trapezium, scaphoid, and lunate give the best results. With improvement in surgical technique and capsular reinforcement there has been less dislocation of the implant.

The use of the flexible wrist implant of Swanson and the total wrist implants of Voltz and Meuli are now being used for the severe rheumatoid wrist where arthrodesis is undesirable.[9] Evolution of these prostheses indicates that they will assume a prominent role in wrist replacement therapy.

**Fig. 6 — "The forgotten dubbed golf shot" causing a fracture of the hook of the hamate and injury to the motor branch of the ulnar nerve. Atrophy of intrinsic muscles and electromyographic changes developed.**

## Summary

In the past ten years rapid and spectacular improvements have been made in joint replacement surgery. A separation and classification of carpal fractures, dislocations, and sprains have led to a more precise diagnosis and better treatment. Microsurgical technique has made reimplantation a practical and feasible procedure. Biomechanical laboratories, bioengineering data, and computer centers will assure an even greater explosion of knowledge of the wrist and hand function in coming decades as we enter a new millennium. The past is prologue.

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**A good teacher is one who can understand those who are not very good at explaining, and explain to those who are not very good at understanding. — Dwight D. Eisenhower**

# The Spine

## What Changes in 40 Years!

Charles A. Mead, M.D.

**Abstract: In 40 years there have been significant changes in the diagnosis and treatment of low back problems. These are highlighted in this article.**

As the author's professional experience passes the 30 year mark, a reflective gaze reveals the tremendous changes that have occurred in spinal orthopaedics. While many advances are the natural result of such generalized advances as antibiotics, nuclear medicine, and contrast radiography, many are the product of spectacular individual genius and original thinking.

The embryology of the spine and central nervous system was rather completely understood decades ago but the teratological effects of radiation, oxygen tension changes and chemical influences in the production of spinal dysrhaphism, congenital scoliosis and other birth defects have been discovered and explored more recently. Previously the infant with a myelomeningocele had a very limited life expectancy; now immediate closure of the defect and spinal fluid shunting by the neurosurgeons challenges the orthopaedists to rehabilitate the child. Early and careful diagnosis of muscle imbalance and its correction by tendon transfers, tenotomies and neurectomies sharpens the orthopaedic skills that were in danger of being dulled or lost by the decline in polio incidence. The myelodysplastics, however, who never used to make it out of infancy, are now maturing into independent and useful adults.

Scoliosis is one condition that, glowingly, demonstrates the startling scientific advances of modern orthopaedics. Gone are the days of leather corsets, turnbuckle jackets and disfigured scoliotic dwarfs with early cor pulmonale death as their inheritance. Instead, we now have school screening programs for early detection of idiopathic curves that can be controlled by Milwaukee braces and exercise programs obviating the need for surgery in most cases. Those curves that do need surgery now respond to instrumentation with Harrington rods, Dwyer apparatus and Knodt rods enabling the contemporary surgeon to achieve much greater correction of the curve with much reduced incidence of pseudarthrosis. Modern anesthesia, autotransfusions, ultrasonic instruments, intraoperative awakening and Halo traction were unknown a few years ago. The use of orthoplast, polypropylene and other thermolabile plastics now permit fabrication of comfortable, lightweight and inconspicuous orthoses or braces for pre- and postoperative use in scoliosis. Patients can now engage in sports, swimming, and other activities so important to a growing child while under active treatment. The nighttime use of spinal muscle stimulators may in the future make other scoliosis treatments obsolete.

Spondylolysis and spondylolisthesis were believed to be entirely congenital or developmental defects 40 years ago but now suspect are stress or fatigue fractures of the pars interarticularis particularly in the young athlete or "Pop Warner" linebacker. That some of these defects may heal with appropriate treatment is a recent concept.

Antibiotics and immunology have markedly altered orthopaedic practice in 40 years. Twisted spines from poliomyelitis are now seen only in primitive or underdeveloped countries. Tuberculous spondylitis or Pott's disease which formerly caused many kyphotic deformities and paraplegics is now virtually unknown in the modern world.

Vertebral osteomyelitis is still seen but is now usually the result of some immune defect in the patient.

However, change begets change and a new disease has arisen in the growing spine as a side effect or trade off of the irradiation of neonatal or pediatric neoplasms such as Wilms' tumors and neuroblastomas. Patients are now being cured of these formerly fatal conditions but the late effects of the treatment are being seen in stunted, kyphotic, and scoliotic spines. A small price to pay for the saving of the patient, but nevertheless a growing challenge to the orthopaedist for treatment. Perhaps yet

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unknown late, late effects of irradiation and chemotherapy are yet to be seen.

In the adult spine there have also been many startling advances in diagnosis and treatment in four decades. Previously, in addition to fractures and dislocations with and without paralysis, there was "lumbago" with and without sciatica. Herniation of the nucleus pulposus was described about 40 years ago and shortly afterward the use of 2 cc of Lipiodol intrathecally with fluoroscopic examination permitted preoperative confirmation and localization. Now we can use 10 to 15 or more cc's of pantopaque or even water soluble contrast media not requiring removal and with image intensification and video tape obtain far superior and safer visualization in myelography. Diagnostic confirmation and localization can now be achieved with electromyography, axial tomography (with and without computer assistance) and graduated spinal block anesthesia testing.

Also available now for selected use in difficult problems are discography, nerve root sleeve opacification and epidural spinal venography. The use of psychologic profiling of patients with complex low back problems is of much assistance (i.e. know as much about the patient who has the backache as about the backache the patient has).

The orthopaedist may now elect to deal with the prolapsed intervertebral disc by chemonucleolysis (shrinking or dissolving the disc material by local injection of proteolytic enzymes), by conventional partial laminotomy and surgical excision or by microsurgical dissection and excision made possible by recent advances in fiberoptics, surgical microscopes, and microcoagulates. Contemporary positioning aids for "knee-chest" positioning during spinal surgery and hypotensive anesthesia make for nearly bloodless surgery and permit procedures not possible several decades ago.

In the management of severe spinal trauma, particularly that with neurologic deficit, a "wait and see" attitude was formerly customary. Contemporary orthopaedics demands early exploration of the severely traumatized spine with removal of bone fragments, reduction of dislocations, and correction of deformity due to displacement. Internal fixation with Harrington rods and simultaneous fusion provide the stabilization so vital to early mobilization of the patient and prevention of complications that previously caused over 50% mortality in the first year. Even if full neurologic recovery is not possible (and sometimes it does occur), the lowering of the neurologic level by one or two spinal segments is frequently accomplished and is of great benefit to the quadriplegic or paraplegic victim. Another recent advance in the treatment of disorders of the adult spine is the corrective osteotomy of the spine frozen in a position of crippling permanent flexion by ankylosing spondylitis of Marie-Strumpell. A Canadian orthopaedist has pioneered resection osteotomy done under local anesthesia to relieve the chin on chest "navel contemplation" of these unfortunates whose complete bony ankylosis of their spines was previously thought uncorrectable.

Likewise, the adult scoliotic is currently being salvaged from a life of pain and disability and premature death by halofemoral or halopelvic traction followed by staged releases, instrumentation and fusion of spines formerly considered inoperable. Heroic and risky — yes, but feasible and done regularly in scoliosis treatment centers today. Aggressive surgical removal of tumors and infections with many segment strut graft replacements can now be done through anterior, posterior or posterolateral approaches not even dreamed of four or five decades ago. Tissue diagnosis and cultures of lesions of vertebral bodies and interspaces can now be obtained by "needle" or "punch" technique not feasible 20 years ago.

It is in the aging spine that we are just beginning to make significant progress. The understanding of spinal stenosis as a cause for cauda equina claudication had to await the development of axial tomography capability. Whereas, we formerly believed that solid fusion must be the answer to spinal problems, we now know this is not true. We no longer subject patients over 40 to attempts at fusion but instead concentrate our efforts on discovering the location of their painful constrictions and impingements and the accomplishing of their surgical correction by meticulous and extensive decompression and excision. We are now taking down many fusions we did years ago and relieving the nerve root entrapment produced by the bony proliferation of the fusion mass as it responds to Wolff's law.

Paget's disease and senile osteoporosis remain a challenge to us as present treatments are complicated and confusing and frequently not productive of quick and effective relief.

It strains the imagination to conceive that the next four decades can equal the progress of the past four.

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**The final goal of any leader is not restraint . . . but fulfillment.**

# Recent Advances in Diagnosis and Surgery for Painful Spinal Disorders

Mark D. Brown, M.D., Ph.D.

**Abstract: Advances in diagnosis and technique for correction of painful spinal disorders are described. Methods utilized to decrease the incidence of complication of surgery are enumerated. A better understanding of the pathologic anatomy of the spine; newer, safer diagnostic tools; the use of hypotensive anesthesia, autotransfusion, blood magnification and fiberoptic lighting in surgery are described, and an explanation of how these advances help the patient are given.**

The risks of major elective reconstructive spine surgery have been minimized in recent years through development and use of several new techniques. These include surgery under magnification, improved fiberoptic lighting, availability of banked bone for replacement of lost or excised bone, hypotensive anesthesia, autotransfusion blood, better understanding of the pathologic anatomy of the spine, improved hemostasis techniques, and prophylactic antibiotics. In addition, patients are benefitting from more thorough preoperative diagnosis as well as exciting new diagnostic tools that help in the planning of surgery.

The physician who is called upon to advise, console, and reassure patients who require spine surgery will be relieved to know that through coordinated diagnostic approach to the patient and improved operative techniques a reasonable rate of pain relief can be expected.

## Pathophysiology

It soon became apparent to the early spinal surgeons that the proverbial "slipped disc" did not account for the majority of neck and back pain complaints. There were baffling patients in whom pain relief was obtained at surgery despite the failure to find a herniated disc. A renewed interest in the numerous causes of spine pain initiated studies into the pathologic anatomy of the spine from which we have only recently obtained a clear understanding of the changes that can occur in the intravertebral joint (a vertebra and its neural arch articulated with an adjacent vertebra and its neural arch by an intervertebral disc and two facet joints).

Dessication of the jel-like nucleus pulposus of the intervertebral disc leads to poor weight bearing characteristics of the tripod joint complex between the vertebrae. Various permeations of disc narrowing and displacement, facet joint subluxation and hypertropic arthritic changes lead to a variety of nerve entrapment syndromes which can be classified into those from disc displacement alone, constriction of the spinal canal (spinal stenosis), foraminal entrapments, and a combination of one, two or all three of these conditions. Familiarity with the pathologic anatomy has led to a better understanding of why a limited laminectomy and disc excision may not, in all cases, produce a reasonable rate of alleviation of pain.[3] With the advent of new diagnostic tools, including computerized transaxial scanning, a better appreciation of the implications of pathologic anatomy has been obtained.

## Diagnosis

The Pantopaque® (oil) myelogram remains the standard preoperative diagnostic tool for confirmation of diagnosis and planning of surgery. Properly performed it is safe and reasonably accurate.

Water soluble myelographic contrast dye (metrizamide, Amipaque®)[2] has been available in Norway and Sweden for several years and has only recently been approved by the U.S. Food and Drug Administration. Although metrizamide will not totally eliminate the use of oil contrast, it does have the added advantages of better lumbar spinal nerve root visualization and allowing outpatient myelography (Fig. 1). Since a small needle can

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**Fig. 1. — AP Roentgenogram of an oil myelogram lumbar spine (left) compared to a water soluble contrast myelogram (right). Note the extensive visualization of the nerve root sleeves on the right.**

be used for the injection (22 gauge vs 18 gauge for oil contrast myelogram), there are fewer side effects than from oil myelograms and the water soluble dye does not have to be removed, as does the Pantopaque®, because it is absorbed into the blood stream and excreted by the kidneys. In contrast to previously employed water soluble dyes, metrizamide can be used for visualization of the entire spinal canal.

The other exciting new development in the diagnostic armamentarium for spinal disorders has been the advent of computerized transverse axial scanning of the spine. This technique gives a view of the spinal canal as if one were lifting a poker chip from a stack and looking at it face-on-end. This technique, now in its infancy, has theoretically unlimited possibilities for refinement in the future. Knowledgeable medical computer program experts who are familiar with the needs of the spinal surgeons predict the routine use of computer scanning of the spine for accurate localization of soft disc herniations within the next five years.[3] Only recently we were able to confirm the diagnosis of an extruded fourth lumbar disc by nonevasive computerized transaxial scanning utilizing an advanced program specific for the spine in a patient who was known to be highly allergic to iodine x-ray contrast dye (Fig. 2).

Most important of the advances in diagnosis of spinal disorders will be the combination of water soluble contrast myelography with computerized scanning.[4] This will allow the visualization of lateral disc herniation implicating nerve roots within the spinal foramen. The only means for doing this now are epidural venography and surgical exploration, which have their limitations. Despite the advantages of these space-age techniques, the desirability of a number of other standard diagnostic tools will remain. Among these, plain x-rays, stress films, routine tomograms, radioactive technetium bone scans, cystometrograms, psychological testing and special contrast studies such as epidural venograms, discograms and nerve root sleeve injections, each have their indications and place in the sequence of diagnostic tools to be used for accurate confirmation of the specific diagnosis following a careful history and physical examination.

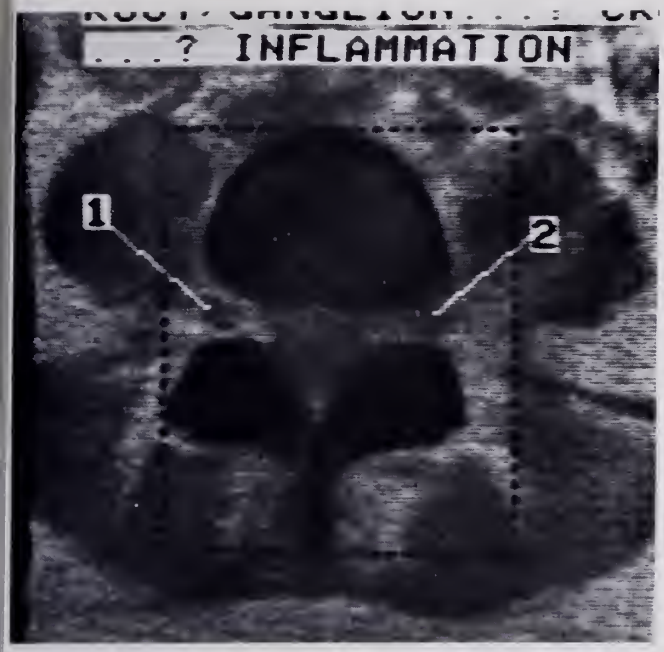


Fig. 2. — Three dimensional computerized scan of the L4-5 intervertebral joints performed by William Glenn, Jr., M.D. Long Beach Memorial Hospital, Long Beach, California #2 was correctly interpreted as nerve root edema secondary to extruded disc.

To coordinate and place these diagnostic modalities in their order, a well developed algorithm which has been useful in our clinic was published in 1975 (Fig. 3). We feel that the judicious use of the diagnostic methods shown gives us the capability of 100% diagnostic accuracy as to the source of a patient's back pain complaint.[5]

Although diagnostic precision approaches perfection, we still fall pitifully short in assuring the patient rapid and permanent pain relief from spine pain in some disorders. The reason for the failure in treatment is a basic lack of understanding as to the source of pain resulting from degeneration of connective tissue matrix of the intervertebral disc.[6] Therefore, the low grade chronic intermittent back pain sufferer must learn to control his pain through exercise, abstinence from harmful medications, and rest. Perhaps, some day in the future, some innovative technique will be developed for relief of pain from degenerative disc disease.

## New Developments in Surgical Management of Spinal Disorders

Most patients are generally knowledgeable concerning the great chance of success with respect to pain relief and increased function following hip joint replacement for

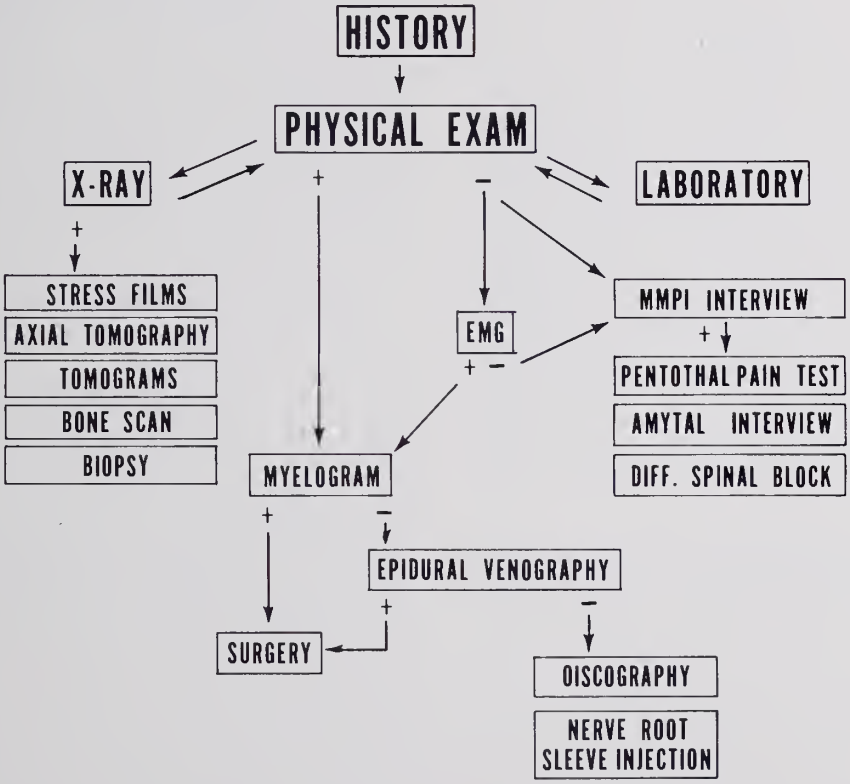


Fig. 3. — Algorithm for decision making in diagnosis of back pain disorders. (Mark D. Brown, M.D. — Diagnosis of Pain Syndrome of the Spine. Ortho. Clinic. North Am. 6:241, 1975)[5]

degenerative arthritis and other diseases. When it comes to spinal surgery, on the other hand, they are wary! Degenerative disease of the spine leads to a more complex sequence of events, as alluded to earlier in this paper. The source of pain from degenerative disease and facet joints leading to chronic strained ligaments and sprained muscles is not entirely clear. An accurate prediction of instability of the intervertebral joint as a consequence of decompression of a herniated disc has not been developed.

The greatest fear of the patient who is faced with spinal surgery (and, for that matter, the most realistic) is that he will not get pain relief. We feel, through a careful history and physical examination concerning the extent of disability and the proper use and sequence of diagnostic studies, well-planned surgery will assure the patient of a greater chance of success. Once surgery is decided upon, several of the following techniques have been found to increase the chance of a successful outcome and diminish the risk of complications.

**Autotransfusion Blood.** Spine surgery may be associated with blood loss which cannot be controlled by the operating surgeon. Exposed cancellous bone surfaces, friable epidural veins and vessels in the subcutaneous tissue and muscle may be obstinate bleeding sites and sources of continued blood loss. Not infrequently, in major reconstructive spine surgery, blood transfusions are required. We have taken three units of blood, one each of three consecutive weeks prior to surgery, on our patients and have used this blood for replacement at the time of surgery. This technique has saved our patients the risk of transmission of disease (hepatitis) and transfusion reactions which, together, may constitute a risk as high as 4% of all homologous blood transfusions.[7] The added advantage of lowering the hematocrit prior to surgery makes the red blood cell loss at surgery less and, in addition, increases the flow rate through capillaries, decreasing, we think, the risk of intraoperative venous thromboses. We have not had to administer a single unit of homologous blood in a patient in whom autotransfusion blood was available.

**Hypotensive Anesthesia.** In addition to the technique of autotransfusion blood, we have instituted hypotensive anesthesia in spinal surgery. We have gained great confidence in this technique following the experience of our anesthesiologist in joint replacement cases. Hypotensive anesthesia has allowed members of our surgical team to perform bilateral total hip replacements under the same anesthesia without administering any homologous blood transfusions. We looked to the hypotensive anesthesia to give us a drier surgical field for better and safer surgical exposure, to decrease the operative time and to decrease or eliminate the amount of homologous blood required. We have experience with more than 100 patients utilizing this technique. The blood loss in major spine surgery has been decreased from 3.48cc/minute to 2.33cc/minute. We have decreased the requirement for blood transfusion from 48% of the patients in the normotensive group to 22% of patients undergoing hypotensive anesthesia. The combination of hypotensive anesthetic techniques and autotransfusion blood availability has greatly increased the safety of major reconstructive spine surgery for our patients.[8]

**Magnification and Better Lighting.** In many instances spinal surgery can be a tedious procedure performed through a deep exposure in an area where lighting is difficult. The surgeon's depth perception may be altered by the depth of the wound. For example, in a patient with a stout neck undergoing a decompression of the cervical nerve root, after cervical disc excision through the anterior approach, we have found 3X power magnification loops attached to our glasses in conjunction with a fiberoptic headlamp to be a great addition to our technique. A well-lighted surgical field magnified three-and-a-half times at a focal distance of 18 inches gives the surgeon excellent depth perception and visualization of the operative field. Decompression of nerve roots and removing fragments of discs from in and around the posterior longitudinal ligament, particularly in the cervical spine, are greatly facilitated by these tools.

In addition, we almost routinely use magnification in salvage spine surgery. The removal of scar tissue from the dura and nerve roots in previously operated lumbar spines is a much safer procedure when performed with magnification and fiberoptic lighting. The surgeon can more easily distinguish scar tissue from nerve roots, particularly when bleeding is difficult to control.

**Control of Infection.** It goes without saying that preoperative preparation of the patients, to make sure they are in optimum condition, is the initial step in prevention of infection. Routine preoperative blood studies and urine analysis are important to rule out urinary tract infections and other unsuspected infections. In addition, we ask our patients to stop smoking and to rehabilitate compromised lung function prior to surgery. Our patients are administered prophylactic antibiotics intravenously just prior to the skin incision. In addition, a triple antibiotic solution containing bacitracin, neomycin and polymyxin is used for lavage frequently throughout the surgery. Wounds exposed between four and six hours, free bone grafts, and extensive wounds in which some dead space cannot be prevented are prone to infection. The avascular disc space is also a site for potential infection. We have not had a wound infection using the present regimen in over 300 major spine

surgeries. At the time of closure, we utilize a polypropylene suction drain which is maintained for 24 to 48 hours postoperatively. We feel that this drain also has an effect in preventing hematoma formation and thus the potential pabulum for infection and, in addition, helps to prevent accumulation of an epidural hematoma under pressure which could lead to postoperative spinal cord or nerve root compression.

**Hemostasis Techniques.** We utilize a laminectomy frame for major lumbar spine surgery[9] which was developed by an anesthesiologist with the rationale of preventing any compression on the inferior vena cava so that blood is not shunted through Batson's epidural venous plexus back to the heart. A negative venous pressure in the vena cava maintains the epidural veins in a flattened position and facilitates exposure of nerve roots and discs in the epidural space.[10] If one encounters bleeding from the epidural veins, the use of the Mallis' bipolar electrode coagulating forceps, which limits the spark gap to within the tips of the forceps, allows for the coagulation for epidural bleeders adjacent to nerve roots with complete safety. In addition, tamponade of epidural bleeders with Gelfoam® soaked in thrombin has been an excellent technique for controlling epidural bleeders. Proper positioning on the table, tamponade of bleeders, the Mallis' bipolar electrode and preoperative preparation have been adjuncts to hypotensive anesthesia in limiting blood loss and providing a cleaner and drier surgical field for safety of the dissection and in prevention of infection. One final method of preserving blood loss at the time of the skin incision is to infiltrate subcutaneously with a 1-to-200,000 adrenalin solution prior to making the skin incision. This usually allows for constriction of the subcutaneous arterial bleeders, which therefore do not have to be electrocoagulated following the skin incision.

## Advances in Surgical Techniques

As recently as 1971, surgical anatomical dissections have been published which have given us a new understanding of the anatomy of the lumbar spine and allow for a more rapid, bloodless exposure of the spine.[11] With the use of the several techniques for arthrodesis, including the intratransverse lateral fusions with autogenous bone from the patient's iliac crest, or with posterior interbody lumbar fusions using banked bone, patients now have a variety of techniques which fit their individual needs for surgical stabilization of the intervertebral joint.

## Rehabilitation Techniques

A much better understanding of the fact that function leads to a more rapid healing has allowed us to mobilize patients who have undergone major reconstructive surgery, including spinal fusions, much more rapidly than in years past. In the early 60's, it was not uncommon for a patient to remain at bed rest for three to four months following a two-level lumbar fusion. Today we allow patients out of bed within 48 hours and they leave the hospital walking and able to care for themselves in the activities of daily living within 10 days following surgery. Depending upon the patient's general physical condition and motivation, it is not unusual for a patient to return to manual labor within six months of an intratransverse lumbar fusion. Patients undergoing simple disc excision can return to clerical work within two to six weeks.

In summary, the new developments in spinal surgery have been described to bring to the attention of the medical community the current surgical techniques available to their patients.

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**Opportunities always look bigger going than coming.**

# Spinal Cord Injury

## State of the Art in Florida

J. Darrell Shea, M.D.

**Abstract: Until recently the prognosis for a patient with spinal cord injury has been very poor. Progress in emergency medical services, coordination and integration of multiple medical and paramedical specialties in a single disability rehabilitation setting has significantly improved this prognosis. Rapidly changing statistics in the incidence levels of quadriplegia and paraplegia are one of the immediate obvious results. Establishing spinal cord injury as a reportable disease, creation of the Spinal Cord Injury Advisory Council and development of a Spinal Cord Injury Plan for Florida have established a position of leadership for this state.**

Until recently management of a spinal cord injury patient was not a problem. Most of them died. Five thousand years ago an Egyptian physician's comments found in the Edwin Smith Surgical Papyrus aptly described the clinical situation: "Thou shouldst say concerning him, one having a dislocation of the vertebra of his neck while he is unconscious of his two legs and two arms and his urine dribbles, an ailment not to be treated."[1] Sixty years ago following World War I, spinal cord injury was 90% plus fatal. Thirty-five years ago Sir Ludwig Guttman opened the National Spinal Cord Injury Centre, Stoke Mandeville, Aylesbury, England, ushering in a new era in spinal cord injury care. From these beginnings evolved the present comprehensive approach to spinal cord injury (SCI) manifested by several outstanding centers throughout the world and the United States.

Today spinal cord injury is not a fatal disease but has an excellent prognosis beyond survival. The traditional depressing clinical picture has given way to well rehabilitated, medically stable individuals returning to home and work. Concomitantly with the improving medical statistics has been a rapidly changing increased incidence of SCI. Various estimates suggest that there are about 10,000 new spinal cord injuries annually in the United States.[2] A recent report by the Insurance Institute for Highway Safety included 5,300 spinal cord injuries from motor vehicle crashes annually.[3] Two thirds are young males less than 36 years of age. Estimates for Florida vary between 300 and 500 new spinal cord injuries per year. An interesting recent variation we have seen in Central Florida is a significantly increasing percentage of females with spinal cord injury. The unique geography and climate of Florida permitting continuous year-round activities may in part contribute to these interesting statistics. Diving into shallow water, falls and industrial injuries are major causes in Florida in addition to the usual motor vehicle accidents, especially motorcycles.

Medical expenses for traumatic paraplegia are also commanding attention from several sectors. Reported economic cost over a lifetime varies between $300,000 to $450,000 for a paraplegic.[2,4] Insurance studies quote first year costs ranging from $18,680 for an incomplete paraplegic to $44,320 for a complete quadriplegic.[3] Review of the National Spinal Cord Injury Model System including 11 regional spinal cord injury centers finds the initial year's median cost to be $20,250.[5] "Non-system" patient expenses are considerably higher with less satisfactory medical-surgical results.

Injury to the spinal cord is a catastrophic insult initiating a massive physiologic response in multiple systems with potentially devastating results. Segmented care involving several medical-surgical specialties has been the traditional management with associated high costs and low total efficiency. Today's modern multidiscipline system of comprehensive services advances from the site of injury with sophisticated emergency medical service evacuation and transportation to a full service acute care facility. Joint specialty emergency evaluation including neurosurgery, orthopaedic surgery, urology and medicine stabilize the medical-surgical problems.

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Early involvement of the members of the spinal cord injury team assures smooth and rapid progress of the patient without costly delays. Early and long-range goals are developed with the family, patient and staff looking beyond to vocational and community requirements. Hospital discharge planning begins immediately and can best be done by an experienced staff familiar with the unique needs of the paraplegic and quadriplegic.

The high respiratory quadriplegic at the 4th cervical level and above requiring expensive and prolonged intensive-care bed utilization represents a new and growing population, placing severe demands on hospital and funding facilities. Two to three years ago these people were relatively unknown because of our inability to cope with them. Now the lay public, sophisticated in cardiopulmonary resuscitation (CPR), is saving the traumatic high quadriplegic until the emergency medical technician (EMT) or paramedic arrives and the patient is transferred to an acute care facility and placed on a respirator in the intensive care unit. High quality medical and nursing ICU care maintains the patient indefinitely with few complications posing new medical, fiscal, social, emotional and rehabilitation problems.

Paralysis below the 4th cervical segment is generally recognized clinically as occurring at seven critical levels with each successive segment adding important motor function (Table I). With the 4th cervical segment intact, the quadriplegic is only able to control his head and has very poor respiratory reserve. Addition of the 5th cervical segment adds weak deltoids and biceps permitting shoulder and elbow motion. Still, the quadriplegic remains completely dependent. Considerable independence is gained with the 6th cervical segment permitting improved shoulder stabilizers and radial wrist extensors which can operate a wrist-driven tenodesis splint. Grooming and activities of daily living and operation of an automobile are possible. The 7th cervical segment adds elbow extension, stronger wrist and finger extension and finger flexion, providing prehension, greatly increasing the vocational and social potential.

Below the C-7, 8 levels of quadriplegia lie the upper thoracic paraplegic with full upper extremity control, independence in all transfers and ability to work and live alone. Lower thoracic and upper lumbar paraplegics can compete much more easily and, in some cases, stand and walk with bracing. Low spinal cord and cauda equina injuries have minimum motor deficits, can walk with bracing and work with minimal restrictions.

Although much motor function is gained with each added spinal cord segment, all patients persist with severe neurologic deficits elsewhere, specifically altered bladder function accounting for many lifetime clinical problems. Improved medical care has all but eliminated the usual mortality figures and causes of death. Life expectancy for the "system" SCIP is approaching "normal," with urological complications being one of the most common causes of death. Intermittent catheterization techniques started early have contributed greatly to decreasing urinary tract infections by promoting development of a balanced functioning neurogenic bladder. Sophisticated urodynamic laboratory studies are supplementing the usual urologic investigations. Recent progress in penile prosthetic implants and prosthetic sphincters have greatly improved independence of function. Salvage diversionary procedures such as ileal conduits are becoming less common. A large share of the recent medical progress can be directly related to the timely and continued urologic involvement in spinal cord injury management and rehabilitation.

**Table I.—Levels of Spinal Cord Injury.**

| Last Intact Cord Level | Muscles Present | Function |
|---|---|---|
| C-3 | Sternocleidomastoid<br>Trapezius | Respiratory Paralysis<br>Usually Fatal |
| C-4 | Trapezius<br>Diaphragm | Respiratory Distress |
| C-5 | Deltoid<br>Biceps | Elbow Flexion |
| C-6 | Extensor carpi radialis longus<br>Extensor carpi radialis brevis | Wrist Extension |
| C-7 | Extensor digitorum communis<br>Flexor carpi radialis<br>Triceps | Wrist Flexion<br>Elbow Extension |
| C-8 | Flexor digitorum superficialis<br>Flexor digitorum profundus | Finger Flexion<br>Finger Extension |
| T-1 | Hand intrinsics | Fine Hand Movements |

Skin breakdown, variously referred to as decubitus ulcers, decubiti, or pressure sores, has been the bane of SCI. A reappraisal of this costly, devastating, occasionally fatal complication has produced an orderly classification and management program which has expedited and simplified treatment.[6] Associated simplified nursing techniques are easily mastered and require no sophisticated equipment beyond that found in an average hospital. Pressure sores, although of significant concern, pose less of a problem than in the past due to prevention and easy recognition. Other nursing skills and experience developed in the SCI center are also disseminated throughout the hospital and nursing home environments.

The indications for laminectomies have been steadily decreasing as clinical reviews find few patients demonstrating postoperative neurologic improvement.[7,8] Rather the surgical emphasis has been directed toward early anatomic reduction and realignment of the spine thereby providing decompression of the cord. Spine stabilization, either surgically by anterior or

posterior fusion or orthotically with the Halo brace, permits early mobilization of the patient into the rehabilitation program with fewer complications, less cost and a better motivated, psychologically stable individual.

Modern, successful spinal cord injury management and rehabilitation is characterized by team care in a single disability orientation. This success is assured by the interaction of several allied health professionals including rehabilitation nursing, physical therapy, occupational therapy, recreational therapy, social service and family counseling, in addition to psychological testing and a sophisticated respiratory therapy department. Unfortunately many states do not have such organized centers. Florida has developed a posture of leadership in delivery of SCI care in addition to having many such facilities. Recognizing the necessity for an accurate data base, the state of Florida has made SCI a reportable disease by establishing the Central Registry for report of traumatic spinal cord injuries (Chapter 74-254, Florida Statutes). Initial efforts by a statewide committee for spinal cord care organized by and among the several rehabilitation centers in Florida were recognized by the legislature. In 1976 the Spinal Cord Injury Advisory Council composed of professional and lay persons was created. After several months of study and meetings, a Spinal Cord Injury Plan for the state of Florida was formulated and submitted to the Secretary of Health and Rehabilitative Services.[9] This effort represents a "first" nationally and serves as a model for state self-analysis. The Plan and the Advisory Council have provided a forum for discussion and debate among diverse sectors concerned with SCI care, including various medical specialties, state agencies, the insurance industry, patients and hospitals, to name a few. Hopefully, through this interaction of consumer and provider our patients will realize many benefits beyond the obvious, basic medical provisions intended.

Spinal cord injury and the resulting devastating physiologic alterations differ from many medical problems by its complex and diverse medical requirements and lifetime permanency. Experience has conclusively demonstrated that proper aggressive acute comprehensive management is of primary importance in the lifetime prognosis of survival and quality of survival. The neurosurgeon or orthopaedic surgeon making initial contact with the acute SCIP has a unique opportunity to initiate the above comprehensive care program that looks beyond the medical-surgical problems to total rehabilitation and community re-entry.

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**A little common sense, a little tolerance, a little good humor, and you don't know how comfortable you can make yourself on this planet.**

**Somerset Maugham**

# Treatment of Thoracolumbar Scoliosis with a Thoracolumbar Sacral Orthosis (TLSO) Alternative to Milwaukee Brace Treatment

Antonio Costelvi, M.D., and John G. Rowley, M.D.

**Abstract: An alternative is presented to the Milwaukee Brace in the treatment of lumbar and low thoracic scoliosis. This orthosis provides a high degree of correction and patient acceptability. Details of the brace are presented as well as illustrations of its use.**

Orthotic treatment for scoliosis had met with little success prior to 1946 when Blount and Schmidt introduced the Milwaukee Brace.[1,2] For many years it remained the mainstay of brace and conservative treatment for the scoliotic patient. Many modifications occurred to refine and improve this brace to the point where its comfort and effectiveness have been maximized in the treatment of scoliotic curvatures.

In the past several years, there have been many efforts to improve the correction obtained in the lumbar curvatures as well as improve upon the cosmetic and functional objections to the Milwaukee Brace.[3] The Milwaukee Brace is highly effective in the control of thoracic curvatures due to the strong pull of its thoracic pads. In the lumbar curve, however, the pressure is placed primarily on the paravertebral muscles and is not as effective in the correction of this type of curve. The frequent objection of Milwaukee Brace wearers to the appearance of the neck ring and the upright structures have encouraged orthotists to try and develop a more cosmetically pleasing orthosis.

In the past several years, much enthusiasm and experience with various models of underarm level orthoses have developed around the world. These take various names such as the "Lexan Jacket," "Prenyl Brace"[4] and the "Boston Brace," but all have the same basic functional of a pelvic girdle with no superstructure and no neck ring. All of these braces work on a 3-point fixation principle with built-in pads for the apex of the curvatures and apply a passive corrective force. The Thoracolumbar Sacral Orthosis (TLSO) has proven maximally effective in the treatment of mild and flexible lumbar and thoracolumbar curves.

## Indications

Appropriate selection of patients is critical with the use of this orthosis and as with any other type of orthosis, cooperation of the patient is required.

Its basic indications are in patients with lumbar and thoracolumbar flexible scoliotic curves within the treatment age. Hall et al believe that patients with an apex above T-10 with curves greater than 40° are not suitable.[5] Winter and Carlson do not feel the orthosis is indicated in patients with an apex above T-12, L-1.[6] We have used an apex of T-10 as a cutoff for utilizing this orthosis. Scoliotic curves with an apex above T-10 should be treated with the appropriate Milwaukee Brace.

The TLSO orthosis is also useful in other clinical settings. The primary indication is patients who would not tolerate a Milwaukee Brace for some other reason. The neuromuscular scoliosis seen in paralytic diseases such as muscular dystrophy, ataxia, etc., respond extremely well to the use of this orthosis. Occasionally symptomatic adult scoliosis is treated with considerable benefit. The orthosis can also be used in congenital type scoliosis in very small children and can be used in postoperative immobilization for various types of spinal surgery.

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Fig. 1. — Front view of standard TLSO brace.

Fig. 2. — Side view of standard TLSO brace.

## Brace Fabrication

This orthosis is constructed in the following manner. All patients are precasted utilizing a standard Risser cast table. Correction is obtained as much as possible while on the table utilizing cervical distraction and hand molding or localizer pressure. The plaster positive is removed immediately from the patient and is given to the orthotist for fabrication of the appropriate orthosis. After completion of this orthosis, the pads are added according to the patient's curve pattern, as determined by clinical x-ray. These pads generally cover approximately two ribs just distal to the apex of the curve; in the lumbar spine, the pads should be just inferior to the apical vertebrae. Various types of material are presently in use for the construction of the TLSO. The most popular is polyprophylene. This provides a relatively rigid strength with extremely light and flexible characteristics which are desirable. The orthosis is usually open posteriorly but an anterior opening may be used if the patient's condition requires and is usually held in place by several Velcro straps which make easy removal possible.

## Treatment

Once fitted with the orthosis and after appropriate adjustments are made by the orthotist, the patient wears the brace for 23 hours per day (similar to that used in the Milwaukee Brace patient). All patients are placed on modified Milwaukee Brace exercises as described by Blount.[1] These exercises are vital if active correction is to be achieved. The exercises out of the orthosis are the same as for the Milwaukee Brace but those in the orthosis must be modified as this is a confining orthosis and does not allow the shifting type of exercise as recommended by Blount. Best results are more likely if the physical therapist has full understanding of the bracing system since the TLSO does not allow as much trunkal movement as the Milwaukee Brace.

The patient is seen after one week of orthosis wear. On the first visit a standing x-ray is made with the patient in the orthosis in order to evaluate fit and correction. He is then followed at intervals of two months with x-rays being made every four months. The orthosis is worn for 23 hours per day for the entire growth period after which gradual weaning is begun following the same principles as for the Milwaukee Brace.

## Discussion

The TLSO has been found to offer certain advantages over the standard Milwaukee Brace in treatment of certain thoracolumbar curves whose apex is T-10 or below. We feel we can provide maximum corrective effect coupled with maximum comfort and acceptance by fitting these patients with the TLSO instead of the Milwaukee Brace. We have noted that the lower the apex of the curvature the greater the efficiency of the TLSO brace.

By eliminating the superstructure, we increase patient acceptability and comfort but create additional problems for the orthotist and orthopaedist as attention to brace construction and brace wear is much more critical. The use of the standard neck ring in the Milwaukee Brace tends to align the head over the pelvis. Without the neck ring present, we must rely on the patient's sense of alignment to stabilize the head over the pelvis. A number of patients will automatically align the head over the sacrum when forces are applied to correct the curvature. Thus, no counter force is needed above the apex of the curve on the opposite side. Occasionally, it is needed however and can be done with a mold extension of the orthosis or a thoracic pad. The most common problem encountered during follow-up with orthosis wear is secondary to growth of the patient. The Milwaukee Brace is inherently designed to allow for longitudinal growth and to some extent lateral growth. The Milwaukee orthosis can be lengthened in response to the patient's trunkal growth. However, with the TLSO, the fit is so precise that gains in weight or height rapidly change the pressure relationship within the orthosis. Relocation of the pads is usually necessary frequently to maintain active correction and a new orthosis must often be fabricated within one to two years of the initial orthosis depending on the age at which the patient is first treated.

## Conclusion

Acceptability is clearly the major advantage of the TLSO that does not require superstructure. No orthosis is going to produce satisfactory results if it remains in the closet and is not accepted by the patient or his parents. Complications in our series were very few and consisted of minor skin irritation. These resolved with slight modification of the brace and the use of lined jackets or body shirts to reduce the contact. Total orthotic rejection was seen in only one individual of our group of patients.

Use of the TLSO demands more physician time and requires a well-trained orthotist familiar with the technique. We have found the TLSO is becoming a valuable addition to our scoliosis armamentarium.

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**The most unhappy of all men is the man who cannot tell what he is going to do, that has got no work cut out for him in the world, and does not go into any. For work is the grand cure of all the maladies and miseries that ever beset mankind — honest work which you intend getting done. — Thomas Carlyle**

# What's Happened in Scoliosis and Other Spinal Deformity Surgery in 15 Years?

Joseph C. Flynn, M.D.

**Abstract: Surgical correction of spine deformity is done today on patients whose disability was previously considered too severe to risk correction. This is due to improvement in preoperative correction, surgical technique, anesthesia and monitoring, blood conservation and better postoperative critical care.**

Today emphasis is on early detection of scoliosis through screening programs. These have made physicians and other health professionals as well as a large number of physical education teachers more aware of scoliosis. Screening which began with MacEwen and Shands in Delaware[1] is spreading across the United States and Canada supported by efforts of the Scoliosis Research Society. In Florida the Citrus Orthopaedic Society, Florida Orthopedic Society, and Florida Medical Association as well as the Easter Seal Society are supporting screening programs. In Florida programs are in effect in 29 of 67 counties and more are joining. We orthopaedists know that much of the surgery for scoliosis, especially idiopathic type, is being prevented by early detection and treatment.

For nonoperative treatment the Milwaukee brace is still the standard for thoracic curves while a newcomer, the thoracolumbar sacral orthosis (TLSO) made of thermoplastic material, has come rapidly into effective use for lumbar curves.[2]

Surgical treatment of many children is still required because forms of scoliosis other than idiopathic are less readily controlled and still produce severe spinal deformity. In the past 15 years we have grown bolder in our surgical treatment of scoliosis and other spinal deformities in children. Surgical correction not believed possible a few years ago is being performed today. Several reasons for this follow:

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### Improved Anesthesia

Dedicated and capable anesthesiologists, excellent airways with good gaseous exchange, central venous pressure, and arterial line monitoring have increased the safety of extensive surgery. A "wake-up test" intraoperative is extremely valuable when there might be paralysis by too much stretching of the spinal cord by the Harrington instrumentation.[3]

### Improved Blood Conservation

Preoperative phlebotomy for scoliosis surgery in children has gained favor because of the safety of giving the patient his or her own blood.[4]

Intraoperative blood salvage is an exciting innovation in scoliotic surgery that is destined to become routine in scoliosis centers.[5]

### Better Postoperative Critical Care

Specially trained nurses in pediatric intensive care units provide close monitoring of the patient postoperatively. This type of care has improved the safety and reduced the complications of extensive spinal surgery on children.

### Improved Surgical Techniques

Orthopaedists are working closely with thoracic surgeons combining anterior surgery on the spine with posterior surgery to better correct spinal deformity and to prevent recurrence (Fig. 1).

Fig. 1A. — The kyphos and ulceration. Spine collapses. Note hand supporting her.

Fig. 1C. — Two years after surgery the weight bearing line is anterior to the reduced kyphos along the healed anterior bone grafts.

Fig. 1B. — Lateral x-ray preoperative.

Fig. 1D. — She sits without support.

Figs. 1A - 1D. — A 7-year-old girl with kyphosis and skin ulceration secondary to myelomeningocele who had a two-stage osteotomy, posterior and anterior fusion. A thoracic surgeon participated in both stages.

The Dwyer apparatus and instruments are in common use for anterior spine fusion.[6] This apparatus combined with Harrington instrumentation technique has been expanded and applied to a variety of spinal deformities (Fig. 2).

Fig. 2A. — Preoperative appearance.

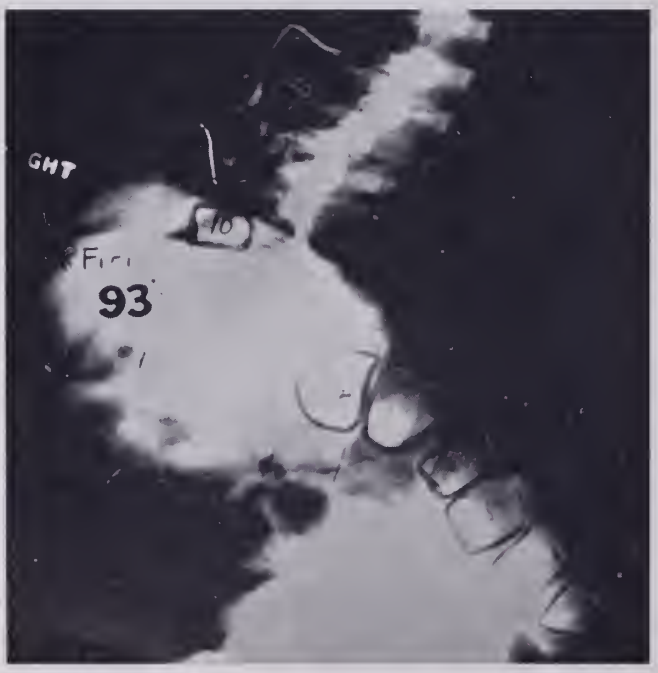


Fig. 2B. — Lateral x-ray.

Fig. 2C. — Anteroposterior view. Note the congenital bar of bone on left.

Fig. 2D. — Anteroposterior view after third stage.

Fig. 2E. — Lateral view. Much of the lordosis has been corrected.

Figs. 2A - 2E. — A 12-year-old boy with myelomeningocele and progressive spinal deformity due to congenital bar producing lordoscoliosis. He had osteotomy of the bar, correction by halo-femoral traction, anterior fusion with Dwyer apparatus, and a third-stage posterior Harrington instrumentation fusion.

## Improved Correction of Severe Deformity

Better correction of severe spinal deformity is being accomplished by a nalo device and counter traction is achieved by pins through the pelvis, femur or suspending the body in a wheelchair.

## Improved Casting Techniques

Postoperative correction can be maintained by combining the halo with a cast. A snug postoperative localizer cast and early ambulation allow the idiopathic scoliotic patient to be home and attending school three weeks after surgery. We are using bivalved thermoplastic thoracolumbar sacral orthoses for postoperative immobilization in the paralytic scoliotics and many of the neuromuscular spine deformities postoperatively. This reduces the weight and adds to the comfort while providing good immobilization postoperatively.

## Broader Patient Selection

Several types of patients with spinal deformity are now operated upon who would not have been 15 years ago. Myelomeningocele patients with severe kyphotic deformity and/or scoliosis may be corrected or improved (Figs. 1, 2). Severe cerebral palsy and other scolioses, formerly considered too severe and dangerous to operate upon, are now being corrected (Fig. 3). Various patients with spinal dysrhaphism and scoliosis may be helped with surgery. In patients with diastematomyelia the bone carina is resected prior to correction and fusion of the spine deformity. Tethered cords are being released, improving the scoliosis and perhaps the neurologic picture in young, growing children.

Various congenital kyphoses, severe Scheuermann's disease and post-tumor radiation kyphosis are managed by combined anterior and posterior surgery.

We are also salvaging failed spinal deformity surgery cases by osteotomy of the old fusion, skeletal traction and refusion in a better corrected position.

Fig. 3A. — Preoperative. Note the pelvic obliquity. She could not sit.

Fig. 3B. — Anteroposterior view after second stage. Pelvis is level.

Fig. 3C. — Lateral view. Much of the abnormal lumbar lordosis is corrected.

Figs. 3A - 3C. — A 15-year-old girl with spastic cerebral palsy with progressive scoliosis and lordosis and pelvic obliquity. Anterior Dwyer instrumentation and fusion were done to straighten the pelvis. Posterior Harrington instrumentation and fusion followed.

Congenital spondylolisthesis with severe slip and severe deformity is managed by combined anterior and posterior fusion, using the posterolateral technique to extend the fusion mass into the transverse processes and the anterior technique to place bone grafts in the interbody spaces at a second stage.

Lastly, more adult scoliotics are being operated upon, salvaging them from a state of chronic pain and, perhaps, lengthening lives that would be shortened by pulmonary hypertension and cor pulmonale from severe scoliotic deformity.

## Those Responsible

For the progress of the past 15 years, many men are responsible. We orthopaedists are thankful to the pioneers of scoliosis: John Cobb, Joseph Risser, Walter Blount, John Moe and Louis Goldstein, for giving us this heritage. Paul Harrington[7] gave us the first and best instruments for correcting and holding the spine for fusion. Arthur Hodgson[8] of Hong Kong taught us to safely approach and fuse the thoracolumbar spine from the front, adding greatly to our capabilities of fusing and holding correction in severe kyphoscoliosis. Allen Dwyer of Australia gave us a practical apparatus for anterior spine correction and fusion and John Hall of Boston improved it. With this apparatus now we can level the pelvis with the first stage procedure (Fig. 3B). We can also get some correction of lordosis (Figs. 2E & 3C). The use of the halo as a new concept in correction was introduced by Perry and Nickel.[9] Others[10] have taken up the torch and boldly pressed on to bring us to the point where we are today.

It is exciting to think what the next 15 years will bring.

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**Excellence in any department can be attained only by the labor of a lifetime; It is not to be purchased at a lesser price.**

**—Samuel Johnson**

# Total Hip Replacement

## Current State of the Art

John J. Jennings, M.D.

**Abstract: An overview of total hip replacement is given. An attempt is made to place the procedure in historical perspective, express current indications for the procedure, and anticipate the future of hip surgery in the arthritic patient. Specific statistical analysis of patients treated at the University of Miami is presented as to results and as to the prophylaxis of thromboembolic disease with aspirin.**

A total hip replacement may be defined as the resurfacing of a diseased diarthrodial, or moveable, hip joint by resecting the damaged cartilagenous surfaces and the insertion of an inert metal or plastic prosthetic device which is usually fixed to the bone with cement. Such devices have been developed over the past 25 years by orthopaedic surgeons. The early work was done by McKee, Farrar, Ring and Muller.[1] However it was not until the report of Sir John Charnley in the Lancet in 1961[2] that the true low friction arthroplasty as we know it today was born. Charnley's early work was with a Teflon acetabular component working against a metallic ball that had replaced the femoral head. His early prosthesis was not cemented into place. In 1962 he realized that the Teflon, although functional, experienced rapid wear with the scattering of debris in the joint cavity. He replaced the acetabular component with one made of high density polyethylene which was cemented into place with methylmethacrylate. Methylmethacrylate had been used in medicine since the 1940's by the oral surgeon and by the neurosurgeon for the repair of cranial defects. It had been found to be inert, durable, and noncarcinogenic. With his engineering concepts and modern materials, Charnley made it possible for the surgeon to convert the painful arthritic hip into one that functioned well and did not hurt.

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### Present Patient Selection and Surgical Management

In 1979 total hip replacement in the properly selected patient can give a 95% predictable good or excellent result. The surgery is indicated in those patients who have a severe degree of pain or loss of functional ability that have failed to be managed by conservative measures. Patients who do well on non-narcotic analgesics are not candidates for joint replacement. Major consideration in any patient being evaluated for total hip replacement is the patient's own understanding and expectations of the procedure. Patients must be brought to realize that although they may have a "good hip" they will not have a "normal hip." Patients who expect to return to heavy labor or vigorous competitive athletics are both unrealistic and headed for surgical disaster. Patients who are markedly obese (greater than 50 pounds overweight) are not good surgical candidates, and every effort to accomplish weight reduction should be made prior to surgery.

High quality roentgenograms of both hips and the pelvis, both knees, and also the lumbosacral spine are necessary for both diagnosis and planning of surgical treatment.

Once the decision has been made to carry out total hip replacement a thorough evaluation of the patient is necessary preoperatively. This should include both medical and rheumatologic consultation where indicated. All patients preoperatively, should have a urinalysis and culture and sensitivity studies done when indicated.

A urinary tract infection, I believe, precludes the doing of any total hip replacement. Clotting parameters should be determined. Physical therapy is an integral part

of the patient's management and should be begun at the bedside preoperatively and carried out postoperatively. Patients are taught specific exercises that they will be required to do throughout their postoperative course. Since many of the patients are elderly males and there is a high incidence of benign prostatic hypertrophy, it should be noted if these patients are able to urinate in the recumbent position. If this is a problem, urologic consultation may be indicated.

The surgical technique for total hip replacement is demanding and well worked out in the literature. Errors in technique are often reflected in long-term results.

Most patients are able to begin to get up and about on the third postoperative day and gradually increase their activities. The average patient is able to return to his home setting approximately two weeks postoperatively. Patients usually require some type of external support (crutches or a cane), but this is at the discretion of the specific surgeon.

## Results

Most authors reporting large series of total hip replacements report approximately the same results. Greater than 90% of patients over 60 years of age at the time of surgery who have not had previous hip surgery can be classified at five years as having a good or excellent result.[3,4] As surgeons have gained expertise with the procedure, the percentage of good results has increased.

Since July 1970 at the University of Miami over 1,300 total hip replacements have been done. A subset of these patients have been evaluated as to their long-term result.[5] The patients selected were the first 50 patients with a confirmed diagnosis of rheumatoid arthritis who were operated upon between July 1970 and July 1974. They comprised approximately 10% of the patients operated upon during that period of time. Patients were graded preoperatively and postoperatively in a prospective manner.

These 50 patients underwent 66 total hip replacements, 16 being bilateral. The average age of the patients was 60.3 years. The average time for duration of hip pain was 5.5 years. Thirty of these patients were taking systemic steroids, and 12 were taking narcotics for relief of pain.

Preoperatively and every six months postoperatively the patients were evaluated as to pain, function and range of motion using the scale of d'Aubigne and Postel. In this scale these three parameters are graded from 1 to 6. Those patients who have severe hip pain receive a grade of 1 while a grade of 6 indicates no pain in the hip. Patients who are confined to bed or a wheelchair are graded as a 1, and patients who are able to move about normally are graded as a 6. If the total motion about the hip is less than 30°, the patient is graded as a 1; if it is greater than 210°, he is graded as a 6. The average follow-up in these patients was 52.4 months. The results in these patients were: The average preoperative rating for pain was 2.2; postoperatively it was 5.8. As to the patients' ability to get about, the average preoperatively was 2.4; postoperatively it rose to 4.8. Preoperatively, the mean range of motion demonstrated by the patients was rated at 3.5; postoperatively, it was 5.2. Such results are both gratifying and predictable.

## Complications

With the implanting of a large foreign body, the fear of sepsis about the device is great. However, with careful patient selection and proper surgical technique the reported incidence has remained below 2%.[6] This figure relates to acute early postoperative infections. Total hip replacement has led to the development of high efficiency filters that are able to markedly lower the bacterial count in the ambient air of the operating theater. The definite effect of such "sterile air rooms" has not been statistically proven as of yet. In a similar manner, the use of prophylactic systemic antibiotics during surgery and postoperatively are generally accepted by surgeons, but there is no definite proof that they affect the long-term outcome. As time has gone on, more patients are being seen with delayed infections. It is thought that many of these are due to hematogenous spread from another site. Patients must be cautioned that if they are to undergo any procedure that is known to cause a bacteremia they should be covered with appropriate antibiotics (tooth extraction, manipulation of the urinary tract, etc.).

Much of the work on the development of thromboembolic disease intra-and postoperatively has been done by hip surgeons.[7] Currently it is thought that in the unprophylaxed patient approximately 50% will develop clots in the lower extremities which can be demonstrated by either venography or fibrinogen scanning. As high as 10% of these patients may have pulmonary emboli and a mortality of greater than 2% can be expected. A large body of knowledge has demonstrated that such drugs as coumadin, low-dose heparin, dexdran, and aspirin are effective in lowering this incidence.

At the University of Miami 805 patients have undergone total hip replacement with prophylaxis of thromboembolic disease by aspirin. The patients were given two tablets twice a day, beginning preoperatively and continued until the time of discharge. In reviewing these 805 cases, we found no deaths secondary to pulmonary emboli. Nine patients had a confirmed diagnosis of pulmonary embolus and 42 had clinical evidence of thrombophlebitis. Patients with either a

diagnosis of thrombophlebitis or pulmonary embolus were treated initially with heparin, using the continuous infusion technique. Patients were gradually switched to coumadin and maintained on this drug for a period of three months. The patients' prothrombin time was kept at a level of 1½ to twice control. One patient in this series had a re-embolization.

Early in our experience with total hip replacement postoperative dislocation was not uncommon. As our surgical technique improved, our incidence of dislocation has markedly dropped. We have had three dislocations in the last 300 cases, one of whom has sustained violent trauma.

In the early 1970's, surgeons greatly feared loosening of the acetabular component as well as wear of the high density polyethylene. Neither have proved to be of great clinical significance. The majority of surgical failures represent sterile loosening of the femoral component. Some patients have gone on to fracture their metallic femoral stems. Usually these patients are males weighing greater than 200 pounds who lead an active life. Multiple approaches to the problem of stem breakage have been attempted. Some manufacturers have markedly increased the size of the femoral stem.[8] This, however, has presented a problem of fit in the small patient. At the University of Miami, a prosthesis made of titanium alloy has been developed which is no larger than the previous devices but has greater strength. The problem of stem breakage is not yet totally overcome.

## The Future

There is no doubt that Charnley with his low friction arthroplasty started an avalanche of interest and hard work in the world orthopaedic community. Success of total hip replacement opened multiple vistas. Many individuals have gone on and successfully replaced knees, ankles, shoulders, wrists, and small joints of the hand. Total joint replacement is by no means a static field. Much work is being done on improving fixation of the present devices with or without the use of cement. Others such as Trentani in Italy, Freeman in England, Wagner in Germany, and Eicher in the United States have begun to retain the femoral head and resurface the acetabulum and the femoral head with a double cup type device.[9] The results of such surgery have in no way stood the test of time. Use of cadaver material to resurface the joint is once again being attempted, and the early results are promising.

Total hip replacement, just as any other surgical procedure, strongly demonstrates that with excellent patient selection, proper surgical technique, and closely scrutinized postoperative care a good result is predictable.

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**The head, like the stomach,**
**is most easily infected with poison**
**when it is empty.**

**— Jean Paul Richter**

# Total Hip Replacement

## State of the Art

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**Abstract: Total hip replacement arthroplasty should be used only as a "salvage in old people" with disabling arthritis in one or both hips after all other methods have failed. The cautious approach to conservative treatment involves careful selection of patients by qualified people with approval of the family physician and clearance for surgery by qualified specialists in all fields. Obesity must be controlled. Chronic infections such as influenza, bronchitis, cystitis, and dental caries must be treated successfully and if not controlled the operation should be cancelled. It is a purely elective procedure.**

**This is the report of 1,700 cases in 10 years using 12 types of prostheses. The average age of patients was 72, with 52% between 70 and 80, and nine patients over 90. Complications were high, including 12 deaths in the first 30 days postoperatively. Forty prostheses were changed or removed for loosening, infection and/or breakage. Twenty-four patients had deep infections of which 12 required total removal of all elements and cement. Ninety percent were rated excellent to good (1,530 cases) and 10% fair, poor, and failures (170 cases).**

**The cause of most failures is misjudgment in patient selection and the inexperienced operator with limited surgical ability. There is no substitute for experience.**

Total hip replacement was first performed by Phillip Wiles of England in 1938 in six patients severely affected by Still's disease and next by G. K. McKee in three patients in 1956. In 1958 Charnley and in 1960 McKee and Ferrar began to perform the operation regularly using methylmethacrylate to fix the replacements in bone. The time came when conservative surgery had nothing more to contribute to the management of degenerative hip disease. Unipolar replacement for a bipolar disease was useless so that both sides had to be replaced. The operation should be called an arthroplasty for it is a reconstruction rather than a mere prosthetic insertion. All total hip replacements represent a compromise of one form or another. The operation should be performed only after all conservative measures have been exhausted.

### Conservative Treatment of Hip Disease

The pre-arthrotic stage becomes part of the therapy; it may be decisive for the fate of the hip joint and its owner. Predisposing factors such as obesity can be controlled by diet. A one-ton chassis will not carry a two-ton load for long. Employment is not chosen which puts great demands on the joint or which requires much walking, step climbing, and fatigue. The cane used on the contralateral side can reduce as much as 40% of the load and impact on the diseased joint. It is the most important part of prophylactic care and treatment. Physical therapy is held in high regard in the training period. Relief of pain by heat raises th r ksf r threshold, reduces muscle spasm, and by local hyperemia increases muscle metabolism. One cannot deny the use of drugs for relief of symptoms. Nonnarcotic and preferably nonsteroidal drugs can be employed. Aspirin is used with caution and control. Enteric-coated salicylates act well since they rarely have side effects—in contrast to pyrezolone derivatives which include the so-called anti-inflammatory drugs. Prolonged drug therapy of any kind can be dangerous and habit forming. Repeated intra-articular injections are frowned upon because infection can be introduced, nerves traumatized, and the joint damaged. Braces and other external appliances have been used successfully in nonoperable cases. Closed manipulations under general anesthesia have proven effective in the early treatment. Brute force, however, is to be avoided. Finally, conservative treatment may be the only treatment available for patients with a long history of uncontrollable infection anywhere in the body in bone or soft tissue. When the

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decision is made to operate, and approval is obtained in writing from the family physician and other qualified specialists, the patient is informed of the good and bad news of results and complications of the operation.[1]

### Indications for Operation

Total hip arthroplasty with replacement is best for old people with disabling arthritis in one or both hips. It is performed for only one reason—relief of incessant and unbearable pain. It is unattractive for young people and we advise a different operation, perhaps surface replacement or osteotomy with displacement, preferably something that does not rely on fixing metal to bone.[2] It is, however, difficult to convince anyone to have an osteotomy once they have seen the apparently fantastic and immediate good results of replacement arthroplasty. The operation is not for a 40-year-old who wishes to ski. In most cases, running is contraindicated and jogging is prohibited. Obesity is a factor for failure. Stress and weight are related to joint force. A 250-pound man walking slowly exerts four times his body weight on a prosthesis.

### The Variables

A total hip replacement arthroplasties represent a compromise. There are variables affecting the compromises, some of which are controllable by the surgeon. Parts can wear and create friction, fatigue, and fracture. To date, the best material combination for total hip prostheses has been a forged Multiphase Co-Ni-Cr-Mo alloy Protasul- 10 for the anchorage shaft and a cast Co-Cr-Mo alloy for the ball against a UHMW polyethylene RCH-1000 for the socket to offer the best mechanical advantages. The assembly is held in position against the bone by use of acrylic cement which is reasonably strong in compression but weak in tension. It depends purely upon mechanical blocking and has no adhesive qualities. In its curing process it emits a heat up to 90°c, produces thermal necrosis, and eventually a pseudomembrane at the cement-bone interface. Fortunately this membrane usually disappears after nine to 12 months. The cement is brittle and can crack, especially in the face of stress concentration when it moves repeatedly against or within bone. It may destroy bone. The prosthesis loosens and migrates, and the metal can be fatigue fractured under severe overload (Fig. 1). It is an irritant in a hostile environment and a point of minor resistance for all other bacteria in the body. We have treated metastatic abscesses that appeared as late as six years after initial insertion of the new hip. One patient had a simple infected ingrown toe nail which spread the infection to the hip joint. The abscess was drained in the hip but it recurred in one year and total extirpation was the treatment. These patients have no hip joint and use one or two canes the remainder of their lives if they are fortunate enough to have the infection cleared—and then only if all, including the smallest parts, are removed. One remaining infected particle can cause persistent drainage and a chronic osteomyelitis. Cement, plastic, and metal have no immunological qualities. This mass can easily become a site of sepsis—a quality peculiar to this procedure—a friendly environment for the growth of organisms.

### Choice of Prosthesis

Our work is a reflection of the known masters and their techniques. Each has been visited personally one or more times. Twelve different types of prosthetic assemblies have been employed. A specific prosthesis is individually chosen for each patient. A large heavy person receives a large prosthesis. Conversely, the tiny patient with a small intramedullary canal and a small pelvis receives a smaller device. We consider the status of the person: his age, skeletal strength, body weight, activity expected, and what he will need from the procedure. Seventy-seven percent of our cases have received Muller types or variants thereof. (Fig. 2). At least 20 parts are on the sterile set up at each operation. The plan is made days ahead of time and, if special parts are required as custom devices, they are available from the manufacturer in ample time.

### Complications

Time and space will permit only generalizations. In 1,700 cases there were 12 deaths in the 30-day postoperative period; six pulmonary emboli; four coronary thromboses; one septicemia, and one acute tubular necrosis.[3,4] Forty prostheses were changed or removed due to loosening, infection, or breakage. Twenty-four patients had deep infections; 12 in primary clean cases, and 12 in re-operated "doubtful" cases. Twelve were converted to false joints with no hip assembly. These patients have no head or neck of the femur. They use a lift on the heel and will never walk without the use of one or two canes or crutches.

Absolute failures include two suicides; two others became demented following prolonged unsuccessful treatment for the infection, and one other is institutionalized. There is still one draining sinus not responsive to treatment and two with controlled drainage. Seven of the 12 infected cases were caused by gram-negative organisms which never seemed to become completely inactive. We use appropriate prophylactic antibiotics

Fig. 1. — Case 219, male, age 78. Replacement arthroplasty April 1970. Exchange prosthesis done March 1972 for painful loosening and broken stem. On the left are parts of the cup. At operation the socket cement was found to be cracked and loose. The cup was further mutilated in removal with osteotomes and a corkscrew type of extractor. The cement on the femoral side was broken at the upper medial contact point of cement and bone. This permitted motion at the upper third of the stem. The lower portion held the stem and a cantilever effect was produced and metal fatigue followed. Small parts of the cement were tediously removed with a type of dental drill and special fine chisels. The procedure is shocking and long, usually with four to six pints of blood loss. Risk of infection is dangerously increased.

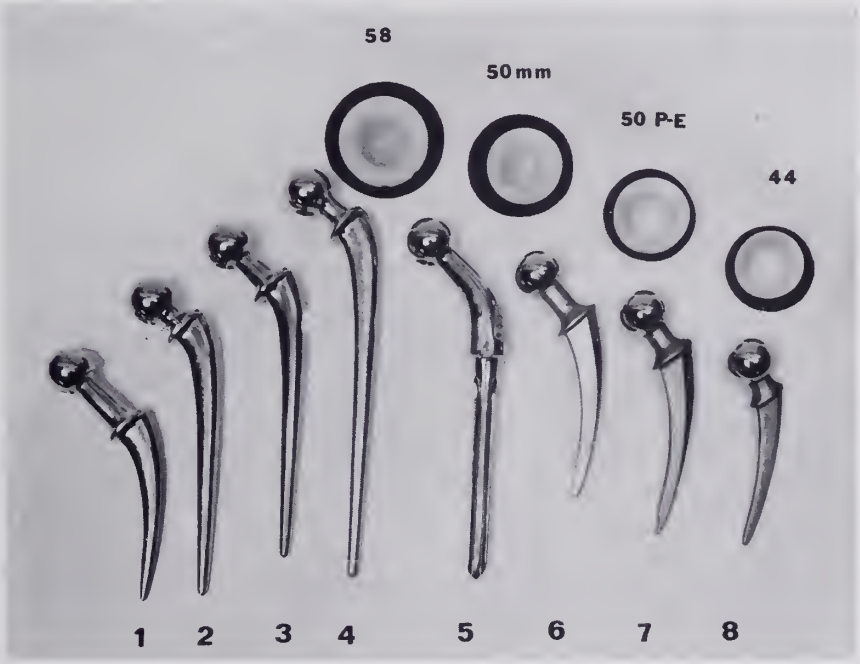


Fig. 2. — Muller variants. All 32 mm head size. (1) Standard stem old model long neck. (2), (3), (4). Short, medium, and long neck with varied stem lengths. (5) Special femoral component used in replacement of large defects of upper femur with absence of head and neck, malignancies, severe traumatic loss of bone, etc. (6), (7), (8). Commonly used femoral components. (7) The most popular model with medium neck and thick curved stem of forged Multiphase Co-Ni-Cr-Mo alloy Protasul- 10. Acetabular cups range from 44 mm to 58 mm outer dimension. Inner dimensions are identified to fit the 32 mm heads. P-E indicates polyester material, no longer in use. All other cups are UHMW polyethylene RCH-1000. Seventy-seven percent of our series of 1,700 replacements are from the Muller variants.

routinely, but question their beneficial effect beyond the period of surgery and 24 hours thereafter, unless we are dealing with a specific deep infection which is responsive and sensitive to specific medication. In the early days, hematoma was the single major predisposing factor leading to infection. Evacuation is done in surgery under anesthesia with the strictest aseptic precautions.

Stem Loosening: Thirty five were revised for stem loosening. The causes were 40% infection and 60% technical factors. We repeat that cement has no adhesive properties. For its hold, it depends on undercuts, holes or furrows. Adjacent bone is cancellous and porotic. Cement will work loose even in the absence of infection. For this reason rheumatoid patients and the most aged with atrophic bone are predisposed to failure with overuse and abuse of the device. They are predisposed to exhaustion fracture of the pelvis, especially in the dysplastic hips with shallow sockets. We had six dislocations due to technical failures. All were replaced by open reduction, and all recovered. Closed reduction is not advocated because of the impingement of soft tissue between the head of the prosthesis and the acetabular component.

## Discussion

One way or the other, total hip replacement arthroplasty is here to stay. It will not be put away. Metal-to-metal, metal-to-plastic, cement or no cement—these are the details to be decided by analysis of results of conscientious investigators passionately examining their own experiences. It is hoped that commercialism implicit in the potential of these devices does not precipitate catastrophe. One would hope that the manufacturers will exert a degree of responsible restraint in their advertising and distribution. Great claims are made for their methods and their results, sometimes without reference to the serious complications including those mentioned in this paper—death, emboli, infections, suicides, dementia, and depression. Some temperaments will never be psychologically geared for the procedure. Some surgeons cannot say "no" to a patient after they have obtained some dramatic results. Sir John Charnley continues to say: "if present popularity of total hip replacement goes into future decline, the failure will result not in the biomechanical laboratories, but in the failure to select patients properly." Total hip replacement arthroplasty is not a simple surgical exercise. It is a procedure which requires complete medical knowledge of the patient and application of sound orthopaedic mechanical principles for the remainder of that prospective patient's life. In the hands of the experienced surgeon, total hip replacement holds a 90% success rate in 10 years. Each repeated surgical procedure on the same patient and the same hip increases the infection potential—10% on the first repeat, 20% on the second, and 50% on the third. If a hip is replaced at age 25, and again at 35, the third time at 45, the prognosis can be tragic. Redoing a hip replacement produces disappointing results. The quality of the original replacement never is regained.

Vascular Complications: Our deaths from pulmonary embolism have been under 1%. Morbidity is higher. Clinical diagnosis of thrombophlebitis is basically unsatisfactory. We believe, as most authors, that the actual incidence is as high as 20%. A venogram may be required for the diagnosis. In our experience the appearance of a deep vein thrombosis is eight to 12 days postoperatively. The contralateral side is frequently involved, and bilateral disease occurs because there is the general factor of hypercoagulability. I am not an advocate of the blind control of pulmonary embolism or deep vein thrombosis by the use of aspirin. Since aspirin has been declared effective only in the male; it has limited use, and the statistics are fundamentally incorrect. We use the small dose heparin method: 5,000 units every 12 hours, but one must maintain adequate plasma-heparin levels, pre-, during, and postoperatively. This requires sophisticated technique commonly not available in the average general hospital. We have a simple formula for prognostication called the "Rule of the Four Tens." In 10 years 10% failures can be expected one way or the other; 10% will be reoperated; 10% will need reoperation but will refuse, and 10% will be deceased or statistically lost.

## A New Technique

A new technique called hip surface replacement has been recently developed. The femoral head is reamed and a metal cup cemented in place. A polyethylene acetabulum is also cemented after preparation of the socket. The advantage is stated that bone stock is preserved and that will allow further reconstruction should failure of the method occur. The indications are well defined by those reporting good results in a five-year period. Prof. Heinz Wagner of Altdorf b. Nurnberg, Germany, has reported more than 500 cases in five years with few complications. Amstutz of Los Angeles and Freeman of London have also had wide experience with the method. The limited surface replacement depends upon good blood supply in the head of the femur; however, we have never associated good blood supply with diseased bone. Firm fixation of the cup on a bone with cement will not guarantee better blood supply. The early writers do not make claims beyond the five-year period and indicate that to date this is a procrastination operation which does offer the young patient with a hip

disease a period of five years with less surgical bone destruction. We have had experience with the Peter Ring noncemented total hip replacement in 41 cases with excellent results. No patients have required change of the device and there were no infections. The ease with which revision surgery can be performed in the uncemented prosthesis gives an immense advantage. Perhaps, we will return to the total noncemented assembly. It has a great advantage in the very elderly. The procedure can be done in one-half hour by the experienced operator from skin to skin.

The "State of the Art" is one of evolution, a continuity with change. Its success can be partly controlled. The cause of most failures is misjudgment in patient selection or the inexperienced operator with limited surgical ability. Technique is one factor that can be currently improved. There is no substitute for experience. If we keep the indications rather rigid and operate upon only those patients who are severely handicapped by hip disease, we will continue to have 90% good results and grateful patients.


### Acknowledgments

Appreciation is extended to the operating room team at Bayfront Medical Center, St. Petersburg, for fine collaboration. Special gratitude is extended to Frank A. Barlow, M.D., whose assistance and advice kept us on the course of the "cautious approach." Credit must be given to Prof. Maurice E. Muller of Bern, Switzerland, whose teaching influence is strongly reflected in our work. Visits and personal communications with Sir John Charnley of England put us in the proper surgical environment in the bioclean room. I am indebted to Mr. John Crawford Adams of London and Mr. Peter A. Ring of Surrey, England, for invaluable help through the years and to Prof. Franz Endler of Vienna, Austria, who assisted me in the U.S.A. with my first case of total hip replacement arthroplasty. "Most men remember obligations, but not often to be grateful." — Simms.


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**The more intelligent people are, the more they see differences. To the unimaginative, everything looks alike.**

# Arthroscopy

## Orthopaedic Peeping Toms

John P. Barrett, M.D.

**Abstract: Arthroscopy is an endoscopic method of examining the inside of joints. It is a valuable, inexpensive, minimally invasive, diagnostic tool which has been proven safe and effective. The joint most commonly examined is the knee. The most commonly investigated structures in the knee are the medial and lateral fibrocartilaginous shock absorbers called menisci.**

Physicians have been peeping into body cavities for years. The cystoscope is well known to internists and urologists. The bronchoscope has been used extensively by thoracic surgeons and pulmonary specialists with great success. In recent years orthopaedic surgeons have borrowed that technology to view most commonly—the knee joint.

The knee has been a diagnostic dilemma for generalists and specialists alike. The usual story is, "I twisted my knee, Doc." A typical examination reveals swelling, tenderness and a normal x-ray. The structures most commonly injured (medial and lateral menisci, and anterior cruciate ligament) cannot be observed, palpated, auscultated or percussed. Since they have no calcium, they cannot be seen on plain x-rays. This has led many to a wait and see attitude in dealing with the patient with an "internal derangement."

Arthrograms were introduced into this diagnostic dilemma 10 years ago. It has become very commonly employed as a diagnostic modality. It is done in a Radiology Department. It does not require anything but local anesthesia. After the injection of contrast medium and air into the knee, a series of tangential x-rays are taken which view both the medial and lateral meniscus on end. Since we are seeing only shadows of the menisci, it has limitations. In the best of hands, the diagnostic accuracy on the medial side of the joint has been around 80%, and the lateral side of the joint considerably less — probably in the range of 60%.

The most common indication for athroscopy is a patient with negative arthrogram and continuing symptoms. Additional indications are in patients being assessed for disability evaluation. Athletes or laborers with compelling financial reasons to return to work quickly and patients with undiagnosed synovitis or arthritis of obscure etiology should be investigated arthroscopically. Tears of the anterior cruciate ligament are easily diagnosed arthroscopically. Tears of the lateral meniscus can be seen with almost 100% accuracy, whereas the accuracy rate with arthrography is only in the 60% range. All of the cartilaginous surfaces can be visualized. The arthrogram rarely sees the entire cartilaginous surface clearly. Synovial biopsies are easily done arthroscopically. The contraindications are few. Only those patients with contraindications to a general or local anesthetic or a local infection near the knee need be denied arthroscopy. The author has performed almost 1,000 examinations to date with three complications. A pyogenic infection, and two postoperative hemarthroses. With proper treatment, each complication has cleared without difficulty.

Fiberoptics have been the major technological advance making arthroscopy widely available. It has taken the hot light off the tip of the arthroscope and replaced it with cool, bright light. There are a variety of brands and sizes of arthroscopes currently available. They range in size from 1.7 mm in diameter to 6.2 mm in diameter. The procedure is usually done in an operating room environment as an outpatient. The anesthesia may be local or may be general, depending upon the circumstances. A patient with high-grade suspicion of a subluxing patella, or acute rupture of the medial or lateral collateral ligaments which cannot be visualized clearly with the arthroscope, usually require general anesthesia for relaxation and careful ligamentous examination. Patients without these problems may be done under local anesthesia by an experienced arthroscopist. The patient

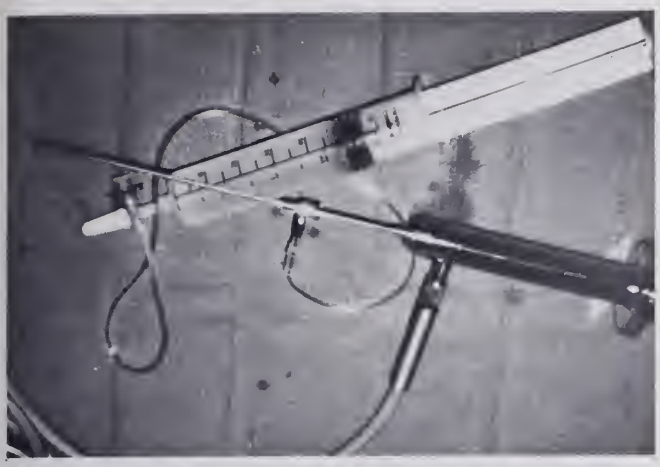

Fig. 1. — Arthroscopic Equipment — A 2mm Dyonics diagnostic arthroscope is seen above. Its accompanying blue fiberoptic cable, trocar sleeve and saline for injection are attached. It is a simple, safe set-up.

Fig. 4. — Stab-Wound Diagnosis — The diagnostic arthroscope has been introduced at the lateral joint line. Saline has been inserted into the knee which is now ready for visualization. The patient has been prepped and draped for sterile reasons.

Fig. 2. — Normal Medial Meniscus — The arthroscopist views a normal medial meniscus to the left and a normal distal femoral condyle above. The smooth leading edge of the meniscus leads to the diagnosis of normal meniscus.

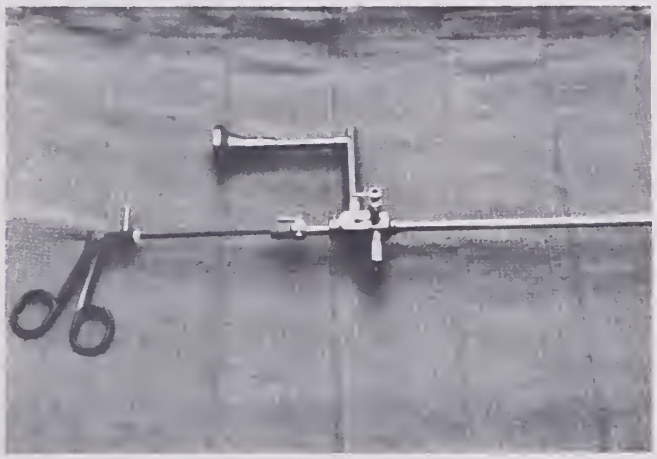

Fig. 5. — Operative Arthroscope — The future is bright for arthroscopy. One can see the offset eye piece and a scissors inserted through an operative arthroscope which allows manipulation of torn menisci and loose bodies.

Fig. 3. — Torn Medial Meniscus — The arthroscopist views the distal femoral condyle above with fibrillation noted to the left and a tear through the medial meniscus in the center.

is prepped and draped for an arthrotomy. A small stab wound is made in the lateral side of the knee. The arthroscope is introduced; if there is fluid present, it is sent to the laboratory for examination. The knee is then filled with 80 to 100 cc of saline. The medial compartment is examined with the knee in a variety of positions allowing the arthroscopist to examine the synovium, medial meniscus, articular surface of the distal femur and proximal tibia. Arthritic changes are easily noted. Synovitis is easily seen. The anterior cruciate may be visualized from that aspect. If the posterior horn of the medial meniscus cannot be carefully seen, a second small stab wound can be made on the lateral jointline and a Kirschner wire or nerve hook can be introduced in order to palpate and probe the meniscus. The arthroscope is then introduced by the same stab wound into the lateral compartment, and the distal

femur, proximal tibia and lateral meniscus are visualized. Parrot-beak tears of the lateral meniscus can be seen, loose bodies can be examined. The knee is then fully extended, and the arthroscope is then introduced beneath the kneecap, and chondromalacia patella, abrasions and subluxations can be noted. The suprapatellar pouch is examined for a plica. Plica shelf syndrome is a currently described lesion which mimics a torn meniscus and, when divided either by arthroscopy or arthrotomy, gives amazing relief of symptoms. After the examination is complete, a band-aid is applied, and the patient discharged home when recovered from the anesthetic. We rarely have a working man even miss more than two days of work. Crutches are not necessary. Casts are not necessary. Oral non-narcotic analgesics usually suffice for pain control. If, during the arthroscopic examination, a lesion is encountered that needs surgery, arthrotomy may be performed at the same time, if the patient has previously agreed. It requires changing of the drapes. Diagnostic accuracy with the arthroscope is literally 100% in accomplished hands — no more guesswork.

The future is bright for arthroscopy. Appearing on the horizon are new technologies allowing for operative intervention by the arthroscope. The operative arthroscopes are generally 5 to 7 mm in diameter. Some lenses are offset, small scissors and rongeurs can be introduced through the arthroscope for manipulation of torn menisci and loose bodies. Power instruments are also becoming available, and one manufacturer has a rotating blade and suction which is power operated in order to shave articular surfaces. A patient who has partial removal of a meniscus arthroscopically can be expected to be done as an outpatient; others can expect a one day hospital stay, probably require crutches for only a day or two afterward, and may be back to work in a week. Conventional arthrotomy for removal of the meniscus ordinarily keeps the patient hospital bound for three to five days and crutches for two to four weeks. Other joints may be viewed arthroscopically, but none have the widespread application that the knee joint does.

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**Fame is vapor. Popularity an accident.**
**Riches take wings. Only one thing endures,**
**and that is character.**

**— Horace Greeley**

# Total Knee Arthroplasty

## A Prospective Study of 180 Cases

Jerry E. Enis, M.D., F.A.C.S.

**Abstract: A prospective study is presented of 180 cases of total knee arthroplasties performed at the University of Miami and followed for over five years. The review outlines the various types of designs in use today, parameters for patient selection and results in this particular operation. The revision rate was found to be 10% and the major reason was a loosening of the tibial component. For the elderly arthritic patient this operative procedure can give hope for a pain free existence with increased mobility and less need for external support.**

The successful use of methylmethacrylate in total hip arthroplasty has increased the enthusiasm in the field of joint replacement of the knee during the past 10 years. Numerous new designs, concepts and techniques of total knee surgery have been developed and are continuing to be reported. It is the intent of this review to present a five-year prospective study of total knee joint replacement performed at the University of Miami between 1972 and 1976.

### Demographic Data

The data base in this series includes 180 procedures done in 143 patients. There were 87 females and 56 males. Osteoarthritis as the reason for the operative procedure had a much higher incidence than rheumatoid arthritis. There were 136 patients with osteoarthritis and 46 patients with rheumatoid arthritis. Twenty-seven patients had bilateral procedures. Thirty nine had multiple joint replacements about the hip and the knee. The average age in the series was 65 years (Table 1).

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**Table 1**

**Data Base**

| | |
|---|---|
| Average age | 65 |
| Total procedure # | 180 |
| Total patient # | 143 |
| Dx osteoarthritis | 134 |
| Dx rheumatoid arthritis | 46 |
| Other | |
| Hemophiliac | 5 |
| Post-traumatic | 2 |
| Bilateral knees | 27 |
| Multiple joint procedures | 39 |
| Revisions (72-76) | 10 |

### Materials and Methods

The types of implants used in this series are categorized into three major designs: The unconstrained surface replacement which should be used in conditions where the ligamentous integrity remains intact. Examples are Gunston,[1] Polycentric,[2] Marmor,[3] et al (Fig. 1). The intermediate constrained prosthesis used in instances where there is less ligamentous stability usually associated with loss of bone stock. Examples are Geomedic,[4] Total Condylar,[5] and Townley[6] (Fig. 2). Lastly, the constrained design which should be used when there is complete loss of ligamentous stability in the medial-lateral and, specifically, in the anterior-posterior planes (Fig. 3). Examples are the Guepar,[7] Shiers,[8] and Waldius.[9] Table 1 gives the breakdown of implants used.

The modalities by which patients were studied were essentially the same criteria by which patients were selected for surgery. Those individuals who were 65 years of age or older, having pain refractory to oral anti-inflammatory agents, injections, and needed protected weight bearing were considered candidates. They had less than a one block ambulatory capability and x-ray changes consistent with destructive joint disease (Table 3).

## Table 2

### Miami Series

| | |
|---|---|
| Constrained Design (14) | |
| Guepar | 11 |
| Shiers | 3 |
| Intermediate Constrained Design (164) | |
| Geomedic | 70 |
| Geomedic II | 69 |
| Sheehan | 25 |
| Non-Constrained Design (2) | |
| Polycentric | 1 |
| Unicompartment | 1 |

Fig. 1. — Polycentric design demonstrating four individual parts. This prosthesis is used in knees with good ligamentous integrity.

Fig. 2. — Geomedic design utilizes only two component parts. This prosthesis is semi-constrained and is used with moderate ligament instability and bone loss.

Fig. 3. — Guepar design is a constrained prosthesis that is used in knees where there is severe ligamentous laxity and bone loss.

## Table 3

### Criteria for Patient Selection

1. Age of patient over 65
2. Pain; need for narcotics
3. Need for crutches, walker or cane
4. Refractory to standard medical treatment
5. Ambulatory capability under one block
6. X-ray changes

In accordance, pain, motion, mobility and the need for external support were chosen as parameters of this report. Each of these four entities were rated on a basis of one to four, one being excellent and four being poor (Tables 4 - 7).

## Discussion

The data in this series indicate that total knee replacement using methylmethacrylate combined with proper selection of patients is an acceptable procedure. The complications with this procedure should be similarly examined in an effort to point out its limitation. A review of the international literature by Kettlecamp[10] indicates that the constrained designs had a failure rate of 18%; the failure rate of the partially constrained designs was 11% and that the bicompartmental nonconstrained designs was 10%. The Miami series had a total of 17 revisions which were used as an end point for failure, giving a failure rate of 10%. In review of the reasons for revision, loosening of the tibial component was the most consistent finding (Table 12). This occurred in 15 cases and is indicated by an increasing radiolucent line about the bone cement interface (Figs. 4, 5). The symptoms of pain usually at the initiation of weight bearing after sitting or sleep and pain that becomes more intense after active

**Table 4**

**Pain**

| | |
|---|---|
| Excellent | No pain, no meds. |
| Good | Occ. pain, occ. meds. |
| Fair | Regular pain, regular meds. |
| Poor | No relief, symptoms worse |

**Table 5**

**Motion**

| | |
|---|---|
| Excellent | 110° |
| Good | 90° |
| Fair | 70° |
| Poor | 70° |

**Table 6**

**Mobility**

| | |
|---|---|
| Excellent | Unlimited walking |
| Good | 6 blocks |
| Fair | 2 - 3 blocks |
| Poor | Indoor activity or non-ambulatory |

**Table 7**

**External Support**

| | |
|---|---|
| Excellent | No support needed |
| Good | Occ. cane |
| Fair | Crutches, walker |
| Poor | Wheelchair |

**Table 8**

**Data Summary**

**Pain**

**(Pre-op)**

| | | |
|---|---|---|
| Excellent | 0 | |
| Good | 0 | |
| Fair | 8 | 100% |
| Poor | 172 | |

**Motion**

**(Pre-op)**

| | | |
|---|---|---|
| Excellent | 40 | 82% |
| Good | 107 | |
| Fair | 25 | 18% |
| Poor | 18 | |

**Mobility**

**(Pre-op)**

| | | |
|---|---|---|
| Excellent | 0 | |
| Good | 1 | |
| Fair | 89 | 99% |
| Poor | 90 | |

**External Support**

| | | |
|---|---|---|
| Excellent | 21 | 36% |
| Good | 44 | |
| Fair | 35 | 64% |
| Poor | 80 | |

**Table 9**

**Data Summary**

**Pain**

**(Post-op)**

| | | |
|---|---|---|
| Excellent | 84 | 81% |
| Good | 39 | |
| Fair | 11 | 19% |
| Poor | 18 | |

**Motion**

**(Post-op)**

| | | |
|---|---|---|
| Excellent | 65 | 78% |
| Good | 53 | |
| Fair | 22 | 22% |
| Poor | 12 | |

**Mobility**

**(Post-op)**

| | | |
|---|---|---|
| Excellent | 46 | 60% |
| Good | 46 | |
| Fair | 43 | 40% |
| Poor | 17 | |

**External Support**

**(Post-op)**

| | | |
|---|---|---|
| Excellent | 62 | 72% |
| Good | 47 | |
| Fair | 32 | 18% |
| Poor | 11 | |

**Table 10**

**Pre-op Data Analysis**

**Pain**

99% Severe Persistent Pain

**Motion**

82% ROM 90°

**Mobility**

100% with ambulation less than 2 blocks

**External Support**

64% required crutches, walker or wheelchair

Fig. 4. — This x-ray illustrates a radioluscent line over 2 mm at the cement bone interface. When associated with pain this is indicative of loosening.

**Table 11**

**Post-op Data Analysis**

**Pain**

81% had almost complete relief of pain

**Motion**

78% - 90° flexion or better

**Mobility**

60% ambulate 6 blocks or more
88% ambulate 3 blocks or more

**External Support**

72% no support or a cane

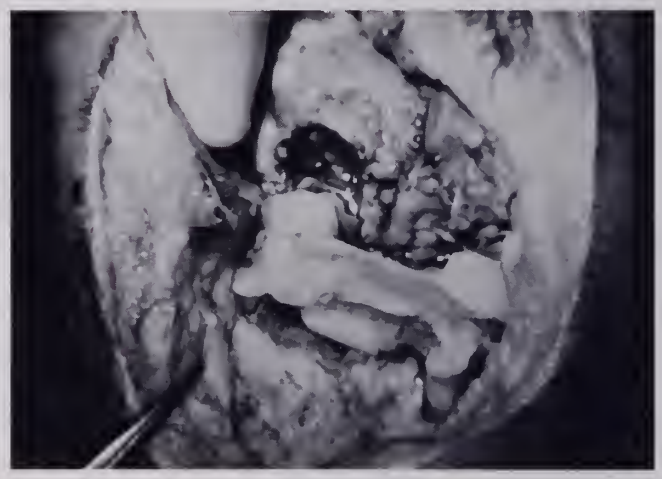

Fig. 5. — Intraoperative findings demonstrating loose tibial component.

**Table 12**

**Reasons for Revision**

1. Loose tibial component (15)
2. Subluxation patellar retinaculum (3)
3. Prosthetic failure (2)
4. Dislocation (1)

Fig. 6. — Preoperative picture illustrating lateral subluxation of the patella resulting in pain on flexion and extension.

**Table 13**

**Mortality/Morbidity**

| | |
|---|---|
| Deaths | (3) |
| Pulmonary Embolism | (2) |
| Infection | (7) |
| Fracture | (6) |
| Amputation | (1) |

use of the extremity are the hallmarks of this problem. Bone scans will show an increased uptake in the area and arthrography can be used to demonstrate dye at the bone cement interface. It is highly suspect that the technical application with malposition of either or both the tibial and femoral components combined with improper soft tissue balancing at the time of surgery was the major reason for this complication. Subluxation of the patella retinaculum was found in three cases which resulted in patella-femoral symptoms with a flexion contracture (Fig. 6). This diagnosis can readily be made clinically by the noted lateral migration of the patella and pain with active flexion extension of the knee between the ranges of 30° and 90° of flexion. All three patients had loosening of the tibial component at the time of revision. Prosthetic failure was noted in two cases and was attributed to design failure. The dislocation was found to result in a neuropathic joint, a situation which remains a relative contraindication to total knee joint replacement. The mortality-morbidity in this series can be seen in Table 13.

In discussing the procedure with patients and their families, the previously mentioned statistics should be kept in mind. The group of patients were a geriatric population, and death from cardiopulmonary etiology was the reason for two of the three deaths. Pulmonary embolism was a suspect cause of death in one and caused severe symptomatology in the other. The infection rate in all knee series is higher than in hip replacement. The seven infected cases were diagnosed on the basis of a persistent draining sinus with postoperative cultures. Of the cases to date, three have gone to fusion, two have stopped drainage but have pain and two have draining wounds and are nonambulatory. Three of the seven infected cases occurred in the constrained design series. The amputation was a result of a dysvascular extremity that developed a pressure sore from disuse of the extremity. Fractures occurred in six cases and were attributed to limited range of motion of the knees. One fracture occurred six weeks after for failed hinge arthroplasty; the remaining fractures were the result of trauma, and all were treated with open reduction/internal fixation. In the follow-up of these fractures, the individuals all had obtained a 90° range of motion.

## Summary

A review of a series of 180 cases of total knee arthroplasties, followed over a five-year period, indicates that this surgical procedure can offer relief of pain and increased ambulatory capacity in the majority of patients operated upon. The anticipated results can only be obtained with careful patient selection and design application. With numerous designs on the market, surgeons should familiarize themselves with the technical limitations of the design they are using to reconstruct the pathophysiological changes that occur in advanced joint diseases of the knee.

With these four criteria as guidelines, 152 procedures in 116 patients were evaluated. All patients had been at least one year post surgery; 28 patients could not be evaluated for the following reasons:

| | |
|---|---|
| Patient out of country | 3 |
| Deaths | 7 |
| Lost to follow-up | 18 |

A comparison of preoperative and the postoperative ratings are given in Tables 8 and 9.

Tables 10 and 11 summarize the data analysis. In the preoperative data analysis, 99% of the patients had persistent pain, 82% had a range of motion over 90°, 100% had ambulatory capability of less than two blocks, and 64% needed external support such as a walker, crutches or a wheelchair. In the postoperative data and data analysis, 81% had almost complete relief of pain, 78% had flexion of 90° or better, and 90% had flexion of 70° or better; 60% could ambulate six blocks or more, 88% ambulated three blocks or more; 72% needed no cane or crutch.

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**Real difficulties can be overcome; it is only the imaginary ones that are unconquerable.**

# Total Ankle Replacement

## A New Approach to an Old Problem

Gregory A. Zych, D.O.
and Walid Mnaymneh, M.D.

**Abstract: Theoretical as well as practical consideration led to the development of an alternative treatment for end-stage ankle diseases. A clinical series of total ankle replacement from the University of Miami is presented as well as summary of other clinical series, as reported in the literature. Early results seem to indicate that total ankle replacement can be considered a viable alternative to ankle fusion in certain select cases.**

Degeneration of the ankle joint whether secondary to trauma, primary osteoarthritis, rheumatoid arthritis or infection represents a significant problem in modern orthopaedics. The ankle joint, a major weight-bearing articulation, can cause severe disability functionally as well as socioeconomically. Traditionally, the only treatment of choice for end-stage ankle disease has been ankle fusion. This procedure, however, must be regarded as suboptimal in certain select patients and it is not without serious complications such as pseudoarthrosis and arthritis of the joints distal to the ankle. In support of this, Stauffer and Assenmacher related the long term results in a group of 23 patients who had been followed for an average of 16 years after ankle fusion. In addition to a pseudoarthrosis range of 30%, only 65% of these patients had good results. Thirty-five percent of this group with poor results complained of inability to work, decreased range of motion and severe pain in the entire foot. It was shown that the subtalar joint actually lost motion after ankle fusion.[6] With these problems in mind and spurred on by the growing success of total joint replacements, notably the hip, several groups of investigators began to design and enter into clinical trials with various total ankle replacements. Our own experience at the University of Miami with this procedure as well as a brief summary of the literature will be presented in this paper.

The Richards' TPR type of total ankle replacement is illustrated in Figure 1. The articular surfaces of the tibia and talus are resected and replaced with a surface prosthesis. The tibial component is concave and the talar component is convex, simulating closely the natural congruency of the ankle joint surfaces. The materials used for the components are ultrahigh molecular weight polyethylene and metals such as stainless steel or cobalt-chromium alloy. This arrangement gives good wear characteristics and a single axis of rotation, totaling 30°, which has been proved to be adequate for normal ambulation.[3] The surgical technique is relatively straightforward and postoperatively most patients are kept at bed rest for 4-5 days and then ambulation with weight-bearing, as tolerated, is begun with two crutches or a walker. Generally, within the second postoperative month, patients are ambulating without any external support and can resume their preoperative activity level.

### Results

Since June 1976, seven total ankle replacements have been performed at the University of Miami and at Miami VA Hospital. All patients were males and ages ranged from 48 to 66 years, the mean being 56 years. The etiology of the ankle disease was post-traumatic arthritis, 5; rheumatoid arthritis, 1; osteoarthritis, 1. The indication for total ankle replacement was severe disabling pain which failed to respond to conservative treatment. All patients had been considered candidates for ankle fusion and the choice of either fusion or total ankle replacement was decided by the patient. The length of hospital stay

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**Fig. 1. — TPR Prosthesis—The components of the Richards' TPR Total Ankle Replacement.**

varied from eight days to two and one-half weeks. At the time of discharge, all patients were ambulatory with either a walker or two crutches. The earliest case had a Mayo Total Ankle Replacement and the rest received the Richards TPR Total Ankle Replacement. Adequate long term follow-up is not available for all cases since we started the series only two years ago. Detailed clinical and roentgenographic data will be presented for a representative case.

A 48-year-old black male sustained a trimalleolar fracture of the left ankle which was treated with open reduction and internal fixation of the medial malleolus. Over several years, severe traumatic arthritis developed in the tibiotalar joint (Fig. 2). He was employed as a foreman and could not ambulate without two crutches most of the time. He was in danger of losing his job because he could not walk. His range of motion preoperatively was 5° short of neutral to 15° of plantar flexion. Some subtalar motion was present. Using Waugh Ankle Evaluation Form, this patient's preoperative score was 19[1]. A TPR Total Ankle Replacement was performed in November 1976 with an uneventful postoperative course (Fig. 3). At the last follow-up, 21 months later, the patient was employed as a construction foreman working 8-10 hours a day. He used no external support and related only occasional pain and swelling in the ankle with excess activity. His range of motion postoperatively was neutral dorsiflexion to 35° of plantar flexion (Fig. 4). He showed a slight limp, secondary to shortening of the extremity. The patient was extremely satisfied with the results. He rated a 70 score postoperatively.

Complications have been encountered in three patients thus far. All related to delayed wound healing after standard anterior longitudinal incisions. Two patients required skin grafting. This is an avoidable complication since in each case excessive retraction of the soft tissues at surgery has been identified as the probable cause. We have modified the skin incision to allow ample exposure without jeopardizing the skin flaps, as in our last two cases.

**Fig. 2. — (A & B): Preop X-rays—Preoperative roentgenograms demonstrate severe degenerative arthritis.**

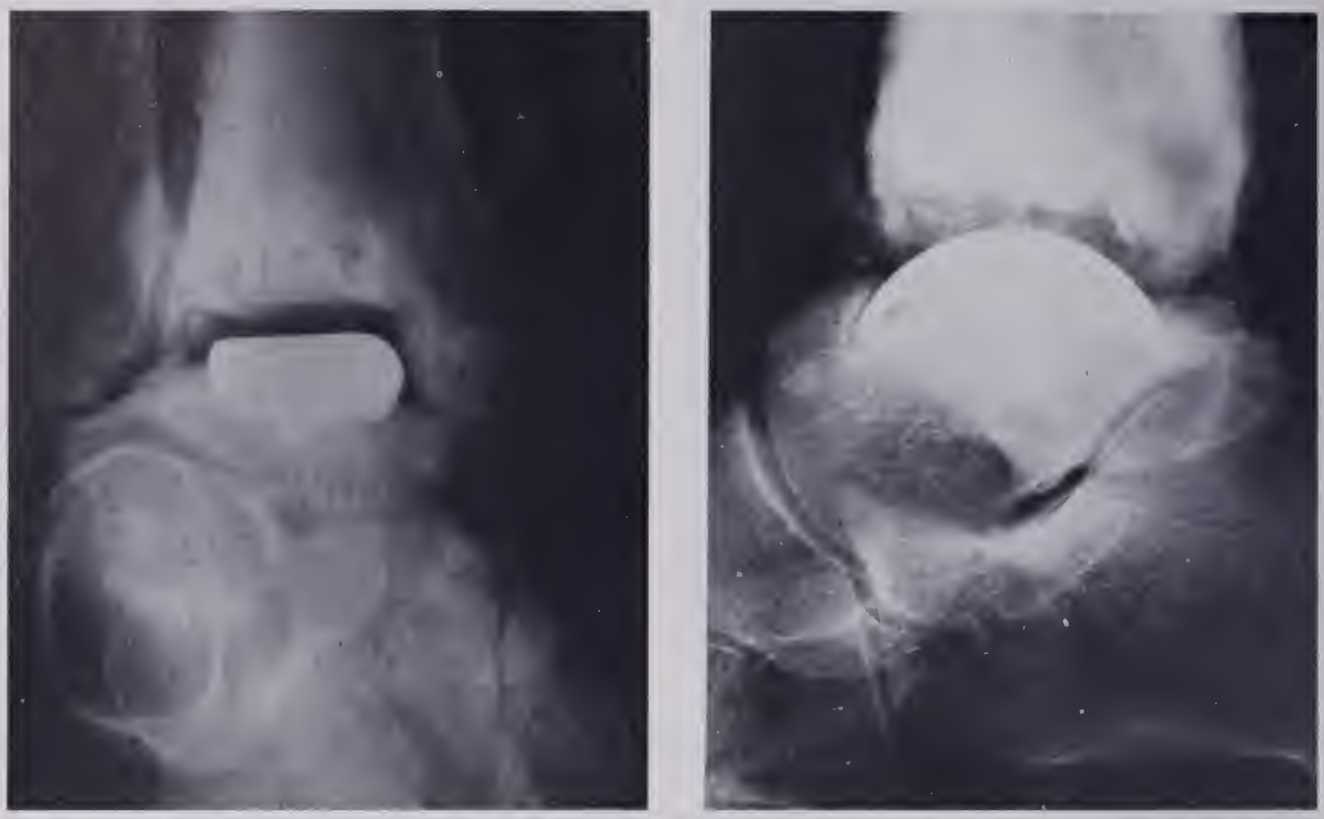

Fig. 3. — (A & B): Postop. X-rays—Postoperative roentgenograms show the implanted prosthesis.

Fig. 4. — (A): Postoperative ROM at 21 months.

Fig. 4. — (B): Postoperative ROM at 21 months from neutral to 35° plantar flexion.

## Summary of Clinical Series

Total ankle replacement is among the most recent of joint replacements and there has been few published reports of clinical series.[1-6] Table I illustrates indications for total ankle replacement in these various series. Post-traumatic arthritis and rheumatoid arthritis have been the most common reason for implanting a total ankle replacement. The average-excellent-to-good results by series are shown in Table 2. They range from 50% in the UCI series to 88% in the Oregon Study, with an average of 72%. This compares quite favorably with the results seen in studies of ankle fusion. Along with these results one must keep in mind the average rate of complication of 24%. Most of these were associated with technical problems.

## Discussion

In review, total ankle replacement is a technicall feasible procedure. It is indicated in that group of patient where ankle fusion has been contemplated. Thes patients include those with post-traumatic arthritis

TABLE 1 — SUMMARY OF INDICATIONS FOR TOTAL ANKLE REPLACEMENT

| | Post-Traumatic Arthritis | Rheumatoid Arthritis | Avascular Necrosis | Other |
|---|---|---|---|---|
| UCI[1] | 15 | 5 | 3 | |
| MAYO[6] | 44 | 28 | | 1 |
| NEWTON[4] | 34 | 10 | 3 | 3 |
| OREGON[2] | 12 | 3 | | 1 |
| SCHOLZ[5] | 21 | 10 | | 1 |

TABLE 2. — AVERAGE-EXCELLENT-AND-GOOD RESULTS

| | |
|---|---|
| OREGON[2] | 88% |
| MAYO[6] | 80% |
| SCHOLZ[5] | 80% |
| NEWTON[4] | 60% |
| UCI[1] | 50% |

rheumatoid arthritis and osteoarthritis. This group has been shown to have the best results thus far. Age, of course, is an important consideration and one should hesitate to do total ankle replacement in the younger nonrheumatoid individual. Heavy loads imposed on the prosthesis by an otherwise healthy young patient could lead to serious late complications.

Contraindications are: failed ankle fusion, avascular necrosis of the talus, acute or chronic sepsis, Charcot arthropathy, paralysis and instability.

Pain relief appears to be excellent with total ankle replacement as has been the case with other current total joint replacements. The absolute gain in motion is small, but important, in that motion is either preserved or increased. With improvement in these two parameters it follows that overall function of the extremity is better.

Complications relate mostly to technical problems and it is certain that as work continues and experience is gained the incidence will decrease.

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**It is not always easy to . . .**

**Apologize**
**Begin over**
**Take advice**
**Be unselfish**
**Keep on trying**
**Be considerate**
**Think and then act**
**Profit by mistakes**
**Forgive and forget**
**Shoulder a blame**

**. . . but it usually pays.**

# Foot Problems in Children

## With Special Reference to Foot Gear

Cabell Young Jr., M.D.

**Abstract: When the primary care physician understands some of the basic fundamentals of frequent foot disorders in children he can treat many of them without feeling compelled to seek orthopedic consultation.**

There is hardly a day in the life of a primary care physician or pediatrician, whether in the office, church, or at poolside, that he is not confronted by some concerned parents about a foot problem in their child. When the doctor determines that he is not faced with the residual deformity of a congenital or a neurological deficit, he then must decide what is the next most practical solution.

If the situation appears to him as minor and will correct itself in time regardless of whatever is done, he is a little hesitant about sending the child in for orthopedic consultation. He is reluctant about incurring additional medical expense when, feeling in his own heart that whatever treatment is prescribed, it is directed at "treating the parents or the grandparents and not the child."

The following observations and opinions have evolved during more than 30 years of orthopedic practice. They have been molded, of course, by conversations with my peers, academy lectures, publications, and to some extent, I hope, rudiments of common sense. I am, therefore, going to discuss in limited depth flat feet, pigeon toes, forefoot adduction deformities and more specifically, the subject of shoes.

Parents of very young children are concerned about their children's shoes, either to protect a normal foot or to prevent a tendency for a foot with an abnormality to progress. In the first place, shoes are essentially articles of clothing. They are protective; the entire shoe protects the foot against the influence of weather and the sole and heel protect against rough, sharp, surfaces and hard pavement. The normal foot requires no support from shoes. The shoe, therefore, should be pliable and interfere as little as possible with the action of the foot. A weak or hypermobile foot is one that on normal weight-bearing changes its shape and contour more than normal. The long arch of the foot rolls inward and flattens; hence the term "flat foot." The heel and heel cord tendon tilt outwards; hence the term "pronated foot." In this foot the inner border of the foot bulges; the inner knuckle of the ankle becomes more prominent, and this is the foot often described as having a "double ankle." To me the accepted orthopedic treatment is to support such a foot throughout the growth period of childhood as long as the deformity is present. It is here that we are in a very controversial area because many of our younger orthopedic surgeons are taught that such an attitude is unnecessary. Be that as it may, I feel that the foot can be protected by shoes, special shoes, by shoe modifications or wedges, and by various types of inserts usually called arch supports. For the weak or hypermobile flat foot, I prefer a slightly inswung shoe with a medium-type sponge rubber arch support, a Thomas-type heel with about 1/8" medial wedge.

A proper shoe fit is essential for foot health. Poorly fitting shoes are uncomfortable, they wear out more rapidly, and they may result in deformities of the foot.

One of the most frequent questions presented to the physician is "When should my infant start to wear shoes?" An infant's foot actually needs no protection while he is in the crib or playpen. Protection is desirable as soon as the infant maneuvers about to any considerable extent outside the playpen. A diagnosis of weak foot can be made as soon as the infant, on suspension, bears some weight on its feet.

Standing with the toes pointed out more than about 45 degrees is often associated with a weak foot. A weak foot requires support and the wearing of adequate shoes, to me, is imperative as soon as the infant is able to draw himself up into standing position.

We are frequently asked when should the infant have high or low shoes. One of the advantages of high-top shoes is that they can be maintained on the foot more

easily than the low quarter. This is particularly important for an infant who resents shoes the first time they are applied and will try to kick them off if he can. With low shoes it would be fairly easy to do so and the mother would be continuously reapplying the shoes. Also, low shoes are difficult to obtain in the sizes for an infant who is learning to stand and walk. Therefore, roughly up until age two years as an arbitrary point, we advise the parents to have high-top shoes.

Later the question is put to the physician as to when should the child have low quarter shoes. The answer is that after the child is about two years of age, low quarter shoes are preferable. They are cooler, drier, and afford adequate protection for the foot. The same answer also holds for children with weak feet. The primary deformity in a weak foot occurs below the level of the ankle. The thin extension of leather upwards in high shoes covers the knuckle of the ankle joint and can hardly be expected to prevent the foot from flattening under the stress of body weight merely by hindering the increasing prominence of these knuckle joints. About all the high-top shoe does for the child over age two is to hide what is going on in a weak foot. A deformity in a weak foot is much more visable in a low shoe expecially in the in-flare at the ankle and the out-flare of the heel.

Parents are also concerned about the brand of shoes they should purchase for their child. There is no dogmatic answer. The shape of children's shoes is so well standardized that it is usually correct. Shoes are made over lasts. A last is a reproduction, generally of maplewood, of the approximate shape of the human foot. A standard or normal last is one in which a set of standard measurements is used throughout, namely, standard length, width, instep, heel and ankle. This kind of last is scientifically designed to fit an average foot. There is no distinction between the last made for the manufacturer of high grade footwear and that produced for making inexpensive shoes. Not all manufacturers, however, make shoes in all available lengths and widths of standard lasts. The less expensive the shoe the more the tendency to concentrate on the most popular sizes. The more expensive the shoe the greater the available range. In fact, in better grade shoes, combination lasts are often available. That is, shoes made on lasts with variations from the standard measurements.

The choice of the store at which the parents should buy the shoes is determined to a minor extent by the brand of shoes sold and to a major extent by the reputation of the store in the community, as determined by reports of patients regarding the service and the salesmen and by the physician's own personal observation and experience. A full range of sizes, lengths and widths must be kept in stock or be readily available. Shoes should not be bought from a mail order house or off the counter. A good fit is difficult to obtain in this way. A shoe store should not have a fluoroscope. No regulations can make shoe fluoroscopy safe. A competent shoe salesman can achieve a good fit without resorting to shoe fluoroscopy or x-ray. The salesman is all-important. He must be experienced and must know his stock. Even standard lasts vary from model to model and a child may be best fitted with a size 6C in one last and a size 6B in another last. A salesman must be able to give as much time as may be necessary to do a good fitting job. If the salesman tells the mother, at any time, that he is "giving the child a pair of shoes which are a little too large so that the child will grow into them," that sales-

Figure 1

Figure 2

man is interested in making a sale not in correctly fitting the foot! If the salesman tells the mother that the child's shoes still fit and that new shoes are not necessary, that salesman is interested in giving a correct fit. Some stores make a practice of telling the mother to return at intervals to check upon whether the child has outgrown his shoes. Children frequently outgrow rather than outwear shoes. This emphasizes the point as to whether a child would need new shoes "now" since he has had them for some time. Children's feet often grow in spurts and the fact that a child has had a pair of shoes for three, four, or five months does not mean that he needs a larger size. The best test is to note the distance between the tip of the first and second toe and the end of the shoe while the child stands. This is usually done quite easily as the toe box has lost some of its stiffness. In the event of any difficulty, the child can be instructed to wiggle his toes. Shoes are outgrown when this distance is one-fourth inch or less. At times, shoes are worn out before they are outgrown. If the linings are badly torn, repairs are undesirable and new ones should be obtained.

If the parents present you with the child and new shoes, you are obligated to see if they are properly fitted. This is usually fairly simple and no special instruments are needed. Both shoes should be put on the child and laced firmly. The child should stand with full weight borne equally on both feet and the following points should be determined:

(1) The position of the eyelet should be noted, they should be parallel;
(2) The heel to toe length measurement should be determined. The tip of the big toe and second toe should be felt through the toe box. The distance between the tip of the toes and the end of the shoe should be from one-half to three-quarters inch. This is about the width of an adult's thumb. If there is a stiffness in the toe box and this measurement is not possible, the weight bearing outline of the foot can be traced and checked against the shoe; (3) The heel to ball of the foot should be checked so that the ball of the foot and the ball of the shoe are at the same point and bend, therefore, in the same place; (4) The width across the ball should be noted; it should be possible to grasp a small fold of leather across the front of the vamp with the thumb and forefinger. If the leather wrinkles, the shoe is too wide; if it seems tense and bulging, the shoe is too narrow; (5) A shoe should fit in action as well as in rest. When the child raises his heels and bends forward so that the weight of the body is on the toes the shoes should not gape at the sides and back; (6) The child should walk around for several minutes; the back of the shoe should fit snugly without slipping or riding up and down and they should be comfortable.

One of the most frequent questions we are asked is whether the child should be allowed to go barefoot. A child with any evidence of a weak foot should keep barefoot walking in the house to a minimum. This can be broadly interpreted to infer that the walking of an unsupported foot on a hard surface is contraindicated. I usually allow these children to walk barefoot in the sand or grass. This is excellent exercise for the foot and toe muscles.

The mildly adducted forefoot, I feel, in spite of many dissenting opinions, is probably the residual of intrauterine pressure during the last trimester of pregnancy. This is also accompanied, usually, by some mild tibial torsion or inturning of the tibia in its distal shaft. Most of these can be improved considerably by conscientious stretching into abduction by the mother daily, about three times a day 20 times each. When the child begins to bear weight, a reverse pair of shoes can be applied to hold the foot into the abducted position.

The child who walks with a pigeon-toe gait can often times be brought around to a more normal gait and stance by the simple application of an outside sole wedge of 1/8″ or the use of a rubber adapter on the heel which has small flanges that spin the foot out on the heel strike. This is called the "torque-heel."

I do feel that some minor foot deformities can lead to problems in later life. If some of them are allowed to persist, they can lead not only to painful feet but because of chronic fatigue producing leg and even backache. By-and-large, however, most of the slight abnormalities of shape and position of a foot will spontaneously correct themselves as the child grows. This is particularly true in feet which have compensated for a slight bow-leg or knock-knee (see illustration). Some of these difficulties, however, may be associated with underlying nutritional disease in the child. For this reason I feel that, if there is any question, these children should be checked by their pediatrician since many times it is impossible to state whether these difficulties will correct themselves spontaneously. The only safe thing to do, in my opinion, is to give the child a well-fitted corrective shoe. I also feel that in the growing child, except in certain selected cases using only soft tissue releases, that surgery is contraindicated before the growth period ceases. Ill-advised surgery around centers of ossification can sometimes produce more of a problem than the surgeon is trying to correct. The only surgical procedure truly involving bone which I feel generally meets with acceptance is that in some cases of severe flat feet an extra-articular bone graft to strut the subtalar joint is occasionally indicated.

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# Congenital Clubfoot

Charles T. Price, M.D.

**Abstract: Evaluation and treatment of congenital clubfoot have changed considerably over the past 10 years. There are two types of clubfeet, flexible and rigid. Satisfactory results can be obtained by serial manipulation and cast changes in all flexible clubfeet and approximately one third of resistant clubfeet. For those feet which do not respond to nonoperative measures, surgical intervention is best performed between the ages of 10 and 12 months. A single stage posteromedial release, as introduced by Vincent Turco in 1971, has been a highly successful procedure and usually results in a normal appearing, flexible foot with a normal gait pattern.**

Significant advances in the evaluation and treatment of congenital clubfoot have been achieved in the past 10 years. Although the etiology remains obscure, we now have a better understanding of the epidemiology and treatment. Until recently the best methods of nonoperative or operative management produced good results in only 70% of patients.[1-3] These poor results led one author to recall the opinion of Bradford who stated in 1889, "The literature on the treatment of clubfeet is as a general rule that of unvarying success. It is often as brilliant as an advertising sheet and, yet, in actual practice there is no lack of half-cured or relapsed cases—sufficient evidence that methods of cure are not universally understood."[4]

In 1971 Vincent Turco introduced the concept of a one-stage posteromedial release, correcting all contractures during the same operative procedure. The results of this procedure have opened a new era in the treatment of clubfeet.

## Etiology and Pathologic Anatomy

Congenital clubfoot is one of the more common abnormalities occurring in about one per thousand live births.[5] The male to female ratio is approximately two to one. There is some suggestion that females are more likely to have resistent clubfoot deformities than males.[3] Palmer reviewed the problem in 1964 and described two different types of congenital clubfoot deformity: a nonhereditary type with a negative family history, a young mother and two-to-one male predominance; and an hereditary type which occurs equally in males and females and is present in 10% of siblings or offspring.[6] Recent studies of the pathoanatomy have demonstrated that the major deformity in congenital clubfoot is excessive medial and plantar deviation of the neck of the talus.[7,8] Because of this intrinsic deformity, the ankle is in equinus, the heel is in varus and the forefoot is adducted. It is now well accepted that internal tibial torsion does not exist as a part of the clubfoot deformity. This misconception was due to the fact that many children with "corrected clubfoot" persisted with a pigeon-toe gait when walking. In actuality this pigeon-toe gait is due to incomplete correction of the foot and many of these children, when carefully examined, will be found to have external rotation of the transmalleolar axis.

## Clinical Picture

The degree and severity of talipes equinovarus may vary from a mild deformity to one in which the toes touch the medial side of the lower leg. In the initial evaluation of an affected infant one should attempt to distinguish between two types of clubfeet: rigid or flexible. In the flexible type, the deformity is less severe and can be readily corrected to neutral position by passive manipulation. In the rigid type, the heel is small and in marked equinus with severe deformity. The foot often appears short and fat. The deformity is fixed and cannot be completely corrected by passive manipulation. Based on these findings, one can usually advise the parents whether nonoperative management will be successful or whether surgical intervention will be likely.

The use of routine two-plane radiography has become increasingly important as a means of evaluating clubfeet.[9] The anteroposterior view is obtained with the foot in 30 degrees of plantar flexion and the tube is directed cranially 30 degrees from the perpendicular. This provides an anteroposterior view of the relationship between the talus and the calcaneus. In the normal foot this angle measures 20 to 40 degrees (Fig. 1).

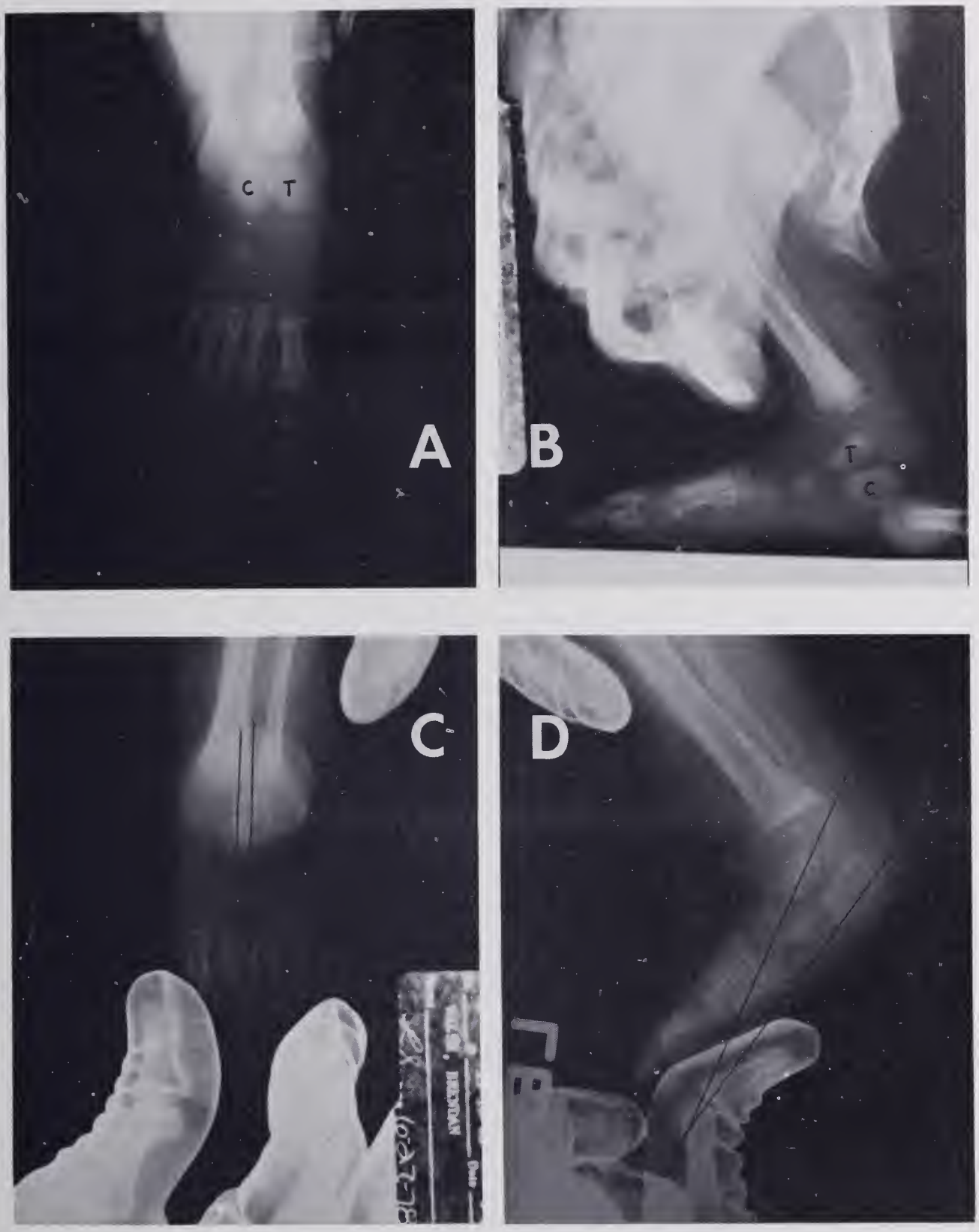


Fig. 1a-b.—Normal relationship between the talus and calcaneus. Fig. 1c-d.—Uncorrected clubfoot after four months of nonoperative management. Note that the longitudinal axes of the talus and calcaneus are more nearly parallel than normal. Also note that the lateral view is a true lateral of the ankle mortise.

The lateral view should be a lateral x-ray of the ankle with the foot in maximum dorsiflexion. When this view is obtained correctly, the tibia and fibula should be superimposed. This indicates that a true lateral of the talus and hind foot has been obtained. The normal talocalcaneal angle in the lateral roentgenogram measures between 35 and 50 degrees.

In contrast the talocalcaneal angle of an uncorrected clubfoot is less than 20 degrees in either the anteroposterior or the lateral projection. When the talocalcaneal angle of a treated clubfoot has been corrected to 30 degrees or more, recurrence is unlikely.

## Treatment

Treatment should be started as soon as possible, preferably immediately following birth. Conservative measures should always be employed first. The foot is gently manipulated and placed in a cast. Kite emphasized the importance of first correcting the forefoot adductus and hindfoot varus. In the very young infant, the foot is manipulated every four to seven days and successive plaster casts are applied. With each change, the foot is gently manipulated to obtain further correction. After the adductus and varus are corrected, the heel is gently stretched into dorsiflexion. As the infant approaches three months of age, casts may be changed at 10 day to two weeks intervals. Once the deformity is corrected, it should be held in the overcorrected position for approximately six weeks. Roentgenograms are made at the time the cast is removed to insure that the correction is complete. Night casts or splints are then worn for several more months to prevent recurrence. Utilizing this method all the flexible type of clubfeet and approximately one third of the rigid type of clubfeet should be out of plaster casts by six months of age.

It is usually apparent by four months of age which feet will correct by nonoperative means and which feet will require surgery. At this age, if there has been little clinical or radiographic evidence of improvement, further nonoperative treatment has a poor chance of success. When one reaches an impasse at four months of age, the foot is allowed to remain out of plaster in anticipation of surgical correction. My preference is to wait until the age of 10 to 12 months before performing surgery. This provides a period of normalcy for the family and allows the foot to grow so that the operative procedure will be technically less difficult and less likely to recur.[10,11]

Surgical correction consists of a single stage release of all contracted structures surrounding the talus. A posteromedial incision is made from the base of the first metatarsal to the heel cord. The neurovascular bundle is protected and a Z-lengthening of the heel cord is performed. The posterior capsule of the tibiotalar and subtalar joints is incised. The posterior tibial tendon is lengthened and the capsule on the medial aspect of the subtalar joint is released. The capsule of the talonavicular joint is incised completely. This extensive procedure must be performed delicately and without haste in order to avoid damage to the articular surfaces. Upon completion of the procedure, the foot can easily be placed in the corrected position. It is held with a smooth pin traversing the talus and the navicular. Intraoperative radiographs are obtained to verify complete correction.

Postoperatively a cast is applied and bivalved in the recovery room. The child is usually discharged on the second or third postoperative day and returns in two weeks for application of a snug-fitting cast. The pin is removed in the office at six weeks and plaster immobilization is continued for a total of four months. The child then sleeps in an 8″ Denis-Browne splint with the feet turned out 30° for approximately eight months.

When the above treatment program is followed, one can expect a normal-appearing, flexible foot with a normal gait by the age of 18 months. Over the past two year period I have performed 22 posteromedial releases. The majority of these patients were referred after failure of nonoperative management. Although the follow-up is short, there has been only one partial recurrence. It developed after an incomplete correction was accepted at the time of surgery.

## Discussion

The best results of nonoperative treatment of congenital clubfoot have been obtained by Kite. He does not believe that soft tissue releases have any place in the treatment of clubfoot. In a recent long term follow-up study of his work, two thirds of his patients were noted to have a good result.[3] However, the average length of time in plaster casts was 20.4 months and some children were immobilized as long as four and one-half years. For physicians less skilled than Kite, spurious correction or failure of correction is more frequent. With the successful development of a one-stage operation, it is now generally believed that surgical correction of the resistant clubfoot is more conservative than prolonged plaster immobilization.

Occasionally an isolated posterior release is indicated at three to four months of age if clinical and radiographic evaluation indicate complete correction of adductus and varus but persistence of equinus. However, Turco and others have observed that posterior release alone, or the two-stage medial-posterior release, has usually produced unsatisfactory results except in milder deformities.[2,12-14] Because of the interrelationships of the talus and the calcaneus, it is impossible to correct equinus deformity completely

unless the varus and adduction components of the deformity are also corrected.

Very recently there has been a trend toward operative intervention at an earlier age. Some authors have advocated recognition of resistant clubfeet and surgical correction as early as two to six weeks of age.[13,15,16] Microsurgical techniques are employed and early results have been promising. Whether surgical correction in the neonatal period provides an improvement over correction obtained at a later age remains to be determined. Herring indicated that the incidence of recurrence is considerably higher in children operated upon under the age of one year. Other authors, in long term follow-up studies, have noted that the age of the patient at the time of surgery was found to have no correlation with the radiographic result, as long as the operation was performed before the age of two years.[11,17]

## Summary

Talipes equinovarus is a relatively common congenital malformation with a familial tendency. There are two types of clubfeet, flexible and rigid. Satisfactory results can be obtained by frequent manipulation and cast changes in all the flexible clubfeet and approximately one third of the resistant clubfeet. For those feet which do not respond to nonoperative measures, surgical intervention is probably best performed between the ages of 10 and 12 months. Excellent results can be expected when surgery is performed before the age of two years. A single stage posteromedial release as introduced by Vincent Turco in 1971 has been a highly successful procedure and usually results in a normal appearing, flexible foot with a normal gait pattern.

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**Maturity in a leader is the ability to deal with people of widely differing opinion, temperament and taste without allowing these differences to interfere with the effectiveness of work or the warmth of human acceptance.**

**Don Robinson**

# Enigma of Solving Some Problems of A Painful Forefoot

Wallace E. Miller, M.D.

**Abstract: Four problems of forefoot pain are presented and analyzed as to diagnosis, a solution for each problem, followed by commentary on the degree of difficulty encountered in each instance. The primary goal is to arouse an awareness in the physician who takes care of foot problems that errors are being made by not developing broader depth in the four entities under discussion; namely, hallux valgus, sesamoid fracture, splay foot, and plantar callus.**

In the greater number of instances the painful foot problem seems to be in the front part of the foot and in both feet. It is no longer useful to think of this complaint as metatarsalgia anymore than it helps to use the term sciatica for back and leg pain. These terms had their usefulness in the past. It is now possible to be more explicit in diagnosis with a better understanding of the dynamics of foot function. This article will attempt to show variances in problems and diagnoses and solutions for altering the problem but not entirely correcting the situation.

## Problem One

A 42-year-old, slightly overweight, woman executive in a local brokerage firm presented with a complaint of pain in both feet more severe on the right. The pain was localized directly under the first metatarsal-phalangeal joint with an enlarged and hypertrophied calloused skin diffusely spread under this entire segmental joint (Fig. 1). There was a flexible bunion prominence but this was not painful. This hallux valgus deformity was not a source of complaint. There was no overlying bursal swelling. An associated finding was a moderate heel valgus secondary to weak medial ankle ligamentous structures. Her perferred shoe was a fairly high-heeled wedge constructed "slip on" shoe but at home she went barefoot and was reasonably comfortable. Whenever possible she kicked off her shoes. Roentgenograms showed a 1° displacement of the first metatarsal head typical of a mild to moderate hallux valgus deformity with no other abnormal findings. The anteroposterior films were made with weight bearing. The diagnosis was believed to be hallux valgus. The recommended treatment was:

1. Change to a low oxford heel shoe (for styling purposes, no higher than the typical Naturalizer "pump heel").
2. Increase the thickness of the sole of the shoe to twice the amount put into the sole by the manufacturer.
3. Use a Spenco insert*.
4. Add 3/16″ medial heel wedge to outer aspect of the heel (not inside the shoe). If this is not sufficient, then add 1/8″ to the medial sole edge after a four to six month trial with just the heel correction.
5. Weight reduction (immediate 15 pound weight loss with a sustained weight loss of between 15 and 20 pounds).

## Discussion

This type of problem has been reasonably solved with a change of shoe wear and corrections as noted.

*The Spenco insert is a unique insole made of DuPont neoprene and constructed to relieve shear force in all directions providing a ball bearing effect. The insole can be placed in any shoe. It is not a metatarsal pad. It is not just any sponge rubber insole, although it has the same logitudinal pad appearance. The carbon in the insert absorbs odor and therefore the insert is long lasting. It comes in full sizes (i.e., men: 10-11; women: 6-7, etc.). The material is made by introducing nitrogen into sheets of neoprene under intense pressure and provides a ball bearing effect absorbing movement in all planes as in a "four way spread," thus eliminating friction between the foot and insole. It is obtained from the Spenco Medical Corporation, P. O. Box 8113, Waco, Texas 76710, or from the local Ped-Orthotist (member of Prescription Footwear Association).

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**Fig. I.— The increased callus under the first metatarsal is noted frequently in *early* hallux valgus deformity but may disappear as it develops into hallux rigidus.**

This particular problem has a much higher incidence in women. Whether one considers the offered solution a conservative approach to the problem or one which is nonaggressive, it has certainly been rewarding to find the patient responding to this type of treatment plan. On the other hand, it has been disheartening to see the solution for her problem put into the surgical hopper without even a try at shoe changes. The patient usually goes along with this approach. It is easier for her to accept the idea of surgery rather than give up her favorite shoe type or to face the formidable task of losing weight.

Over the past several years, patients like the one cited have been seen in the same age range and with the same original findings. The only difference is that their first visit in the office has now followed an unsuccessful surgical exercise and in some instances there have been two surgical procedures, none of which have alleviated the original complaint. Even worse, there is now an iatrogenic component added which negates the good result one might expect from the conservative shoe correction plan as originally outlined. Solving this additional problem frequently involves further surgery and with less predictable good results, each situation requiring a varied individual approach. Some of the surgical procedures that have been observed as being unsuccessful ventures for solving Problem One are:

1. Sesamoidectomy

This procedure seems to be popular with podiatrists but the rationale and results are not justifiable (see Problem Two).

2. Bunionectomy

No matter which surgical procedure is done, the patient will still have her original complaints since the biomechanics of foot and ankle placement are not corrected but are instead allowed to continue to cause further medial forefoot strain.

3. Callus Shaving

Temporary relief and the need for repeated treatments keeps the patient returning more and more frequently and sets the stage for acceptance of a deeper surgical invasion.

4. Cortisone Injections

Some temporary relief will frequently lead to repeated visits for the same deterioration of this first metatarsal-phalangeal joint.

The eventual outcome of patients with Problem One is a maintained plateau of acceptance of the foot the way it is or the eventual change of the hallux valgus deformity into a hallux rigidus. Shoe corrections are no longer helpful once this occurs and surgery then has more to offer.[1,2]

## Problem Two

At age 28, a young lady who works at a sitting-down job in a bank all day decided to take up tennis and enjoyed it so much she played at night on a hard surface court. She presented with pain in one foot and this was diffuse spreading out under the entire forefoot. There was no localized source of pain or tenderness to pressure but a visual finding was slight induration and swelling across the top of the involved foot. The patient was not overweight. Roentgenograms (including weight-bearing films) were nonrevealing until special views were taken of the sesamoids (Figs. 2A-E). The lateral sesamoid of the involved foot showed a hairline crack not in evidence in the opposite foot. The diagnosis was believed to be a complete vertical fracture of the sesamoid in the direction of forward and torsional stress. The recommended treatment was a boot walker cast to be applied immediately and left on for a six week period with application for further six week periods until there was evidence of healing followed by abstinence from sports activities until complete healing was confirmed by roentgenograms (approximately three to four months in a cast and 12 to 14 months away from tennis).

Fig. 2A. — The initial diagnosis and successive stages of healing of the fractured lateral sesamoid of the great toe is best demonstrated in special views. The fine tripartite stellate fracture line is barely visible in the AP view of the left foot.

Fig. 2B. — Two months later absorption widening demonstrates the fracture more clearly with very little resolution of the healing process.

## Discussion

Recently there has been an increased incidence of sesamoid fractures because of current interest and fashion of tennis and jogging. There is an equal incidence noted between men and women with men having a slight edge now that jogging and running are in vogue. The diagnosis is sometimes obscure unless the roentgenograms are made with special care. A scan will be positive but less helpful in the specific plan of treatment. There are variations in findings depending on the amount of breaking up of the sesamoid one finds at whatever stage the patient presents. Regardless of this variation, healing can be expected if one accepts the dogma of immobilization and protection until healing occurs. It is seldom that osteochondritis dissecans or nonunion is the eventual outcome unless one pursues the nontreatment approach to the problem.[3] Herein lies some of the difficulty. The individual is usually intolerant of giving up either tennis or jogging. He wants a plan of treatment that will allow him to continue what he wants to do. Seldom is it a matter of general health. The involved patient is never overweight and there is no cardiac problem that requires this form of exercise. The rejection is because the cast and no activity for months is an unpalatable solution. It would seem, however, that the physician or podiatrist is, in instances of rejection, too subservient to the patient's wishes. Even

Fig. 2C. — This view was made 11 months after the fracture of the sesamoid was discovered. It is now asymptomatic but still not healed sufficiently to return to playing tennis.

Fig. 2D. — This view shows almost complete healing of the sesamoid 18 months after the fracture occurred. It demonstrates that healing can occur with time and given sufficient protective care. There is still incomplete resolution of the fracture and insufficient bone remodeling to withstand the stress of sports (see Fig. 2E).

**Fig. 2E. — This view of the sesamoid is a much better one to determine bone healing and resumption of full activity. As can be noted there is still some incomplete aspect to the fracture healing 20 months after the initial visit. However, normal sesamoid restoration is to be expected. The patient is asymptomatic and the sesamoid has been retained.**

worse, the solution of surgical excision of the medial sesamoid is broached and, once mentioned, appears to be the perfect solution. Unhappily, the removed sesamoid does not get rid of the pain. The reason is that this small little bone appears to be necessary and vital to both activities, that is, playing tennis and jogging. This surgical misadventure places the patient in a position of never getting back to the activity that was so pleasurable. Whereas, the conservative, albeit prolonged, cast treatment would at least have allowed the patient eventually to return to the activity even if it was almost two years later. The Spenco insert is again useful placed in the regular and/or athletic shoe to avoid re-injury.

The enigma of solving Problem Two as in Problem One is as much involved with the concept of care in the physician's mind as it is in his empathy with the patient's lifestyle. Too frequently there is over expectation in surgical results in forefoot pain without changing any other aspect of the patient's habits, whether it be shoe or lifestyle or weight loss.

## Problem Three

A 56-year-old society matron was seen for the first time having had three operative procedures on the left foot and three similarly on the right foot for Morton's neuroma or recurrent neuroma. Her presenting complaint of severe bilateral forefoot pain was related in a history of operative procedures performed two years ago and then repeated one year ago. The first procedure was done at the usual third and fourth interspaces. The second procedure was done again bilaterally but this time at the second and third interspaces. Finally, six months ago, there was a repeat procedure done at the third and fourth interspaces. No relief of her forefoot pain occurred after any of the procedures. She had persisted with a great deal of faith in her surgeon, but now had built up a great deal of hostility about her problem. The incisions were all dorsal. There was no swelling. The foot was not painful to touch, only on weight bearing. In fact, the forefoot could be pulled open and squeezed, giving an

"accordian-like" effect, with only mild discomfort. She stated she had always had difficulty in finding a comfortable pair of shoes. She preferred not to go barefoot. She was not overweight but tall, thin, and heavy set. The feet were longer and wider than one might expect with her body frame. There was a very mild bunion deformity which was asymptomatic. The pain was described as severe, hot, searing, and increasing in severity on prolonged standing. No shoe seemed to offer relief. She brought a sack full of shoes to show what she had tried. None of them were supportive oxfords; all were modish and fashionable, thin soled, and narrower than her feet. However, she had been playing golf with her retired husband daily and wore heavy golf shoes at that time. The roentgenograms were normal except for the widened interspaces noted on weight bearing AP views as compared with nonweight bearing. The diagnosis was felt to be splay foot, bilateral.[4] The recommended treatment was:

1. Use a pair of golf shoes with the cleats removed.
2. Have an anterior heel[5] applied to the heavy golf shoe, with cleats removed, to shift her weight into the mid and hindfoot.
3. Use a contrast bath daily to reduce the "causalgia-like" burning sensation and improve circulation.
4. Do a barefoot walking exercise back and forth in the shallow end of a swimming pool.
5. After an eight to 10 month period, consider operative intervention for the splay foot (Giannestras procedure), one foot at a time, if the nonoperative treatment plan was unsuccessful.

## Discussion

There is probably no other diagnosis as inappropriately applied as Morton's neuroma. It seems to be a ready-made explanation for both the patient and the doctor. Both readily accept it as the cause of the forefoot pain without question. Besides, when the diagnosis is correct and an actual neuroma is found, the relief is dramatic and the patient is extremely grateful (Fig. 3). It is difficult to come up with statistics on the number of successful instances of surgery of this type, but in view of the large number of unhappy patients who change doctors and seem to find their way to the University of Miami Foot Clinic, the suspicion is that there are a lot of these operations being done and perhaps an equally large number of patients going from office to office with the problem of forefoot pain unresolved, having now had the operation. The reasons are twofold. In the first place, the diagnosis is incorrect and, secondly, nerve combinations (not true neuromas) are being removed from other inappropriate spaces. The pathologist obligingly calls the removed nerve with its four tails a neuroma when, in reality, it is probably just an enlarged bulbous nerve combination swollen from some biomechanical unstable forefoot problem.

A means of improving this situation is having the physician develop an awareness that there is another possible explanation of forefoot pain when a patient presents with what seems to be a typical Morton's neuroma problem. The splay foot entity does not seem to be well known and yet in my experience it is more common than Morton's neuroma. A true neuroma is a relatively uncommon entity. The overblown importance but uncommon appearance is not well known. Admittedly, the diagnosis is being made quite often, but the pathologic evidence to substantiate the removal is seldom present. One step along the way in correcting this situation is to exclude the splay foot or a mechanical unstable forefoot as the cause of the "nerve pain" rather than indicting the neuroma. Weight-bearing films and a conservative approach in changes of shoes or the use of corrective devices will do much to avoid the unhappy situation of a patient with an unrelieved problem. A true neuroma seldom responds to conservative treatment. A trial period of six to eight months without surgery will assist in making the correct diagnosis.

## Problem Four

A 19-year-old nurse presented for the first time with a lesion on the bottom of her foot. It had been diagnosed by several doctors in the past few years as a plantar wart. She had many different types of local applications of solutions, cauterization, shaving of the calloused skin, and injections into the lesion. No surgery had been done but it was now being proposed by a podiatrist and she was seeking another opinion. The lesion was located directly under the second metatarsal head. After shaving the hard calloused skin, no hemorrhagic or punctate lesion could be found (Fig. 4). Plantar warts are usually found in the plantar skin between the pressure areas of the metatarsal heads and the punctate hemorrhagic markings after shaving are pathognomonic. Roentgenograms showed a prolonged metatarsal shaft and a disparity in articulations of the metatarsal heads adjoining on either side. The diagnosis was believed to be callus overgrowth overlying a prominent metatarsal head.[6,7] The treatment recommended was:

1. Leave callus untrimmed.
2. Surgical intervention (dorsal wedge resection of proximal metatarsal shaft to elevate and shorten the metatarsal and thus equalize the relationship with the other metatarsal heads)
3. Boot walker cast until the osteotomy is healed (eight to ten weeks).

Figs. 3A-B. — The true Morton's neuroma (A) is a round white glistening structure showing microscopic findings of a benign neoplastic growth. The neural enlargement, on the other hand (B), shows only a bulbous enlargement of normal nerve fibers which will resume a normal appearance when a pressure effect is reduced without surgery.

Figs. 4A-B. — A plantar callus (A) when shaved down will leave a raw area (B) but not a hemorrhagic punctate core as in a plantar wart.

## Discussion

A mistaken diagnosis involving plantar calluses is a frequently encountered situation. Generally, as in this case, it lends itself to prolonged treatment inappropriately applied. The roentgen study of the weight-bearing foot usually reveals the need for bone and metatarsal realignment. The correct treatment involves deep bone surgery that requires prolonged immobilization and carries some risk of complication. Therefore, it is not popular to either pursue the diagnosis past the local callus shaving approach to the problem, or accept the need for a cast for a two to three month period. The plantar wart diagnosis is used by default whether by ignorance or by intent, and some simplified token treatment modality is then used for temporary relief but no permanent cure.

## Concluding Remarks

The four problems discussed have several things in common. First, there was forefoot pain in all instances. Secondly, the diagnosis was incorrect in all of them in the initial care and attention given. Thirdly, there was a solution based directly on the correct diagnosis and an application of basic information. And, finally, the most significant factor of all was the need for an awareness of the physician who takes care of foot problems that forefoot pain problems need more investigative efforts carried out in depth. Too frequently the diagnosis is a "snap one" arrived at as a form of fast vectorized thinking. Certain facts trigger a known response and in the "hurry up" system of many patients to care for there is not a lot of time to stop and analyze the problem. In our present mood for improving health care, we will all need to take into account that this may not always mean a speeded up system. The goal instead is problem solving based on a systematized diagnosis pattern. The application of treatment then is more broadly based. These examples of forefoot pain problems are only a small segment of all of our daily problems, but the way we go about solving the problems applies in all other instances as well.

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- Dr. Miller, Department of Orthopaedics and Rehabilitation, University of Miami School of Medicine, Miami 33101.


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**Indications.** For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

**Warnings.** *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

**Precautions:** Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

**Adverse Reactions.** The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

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*The safety and effectiveness of Motrin have not been established in patients with Functional Class IV rheumatoid arthritis (incapacitated, largely or wholly bedridden, or confined to wheelchair; little or no self-care).

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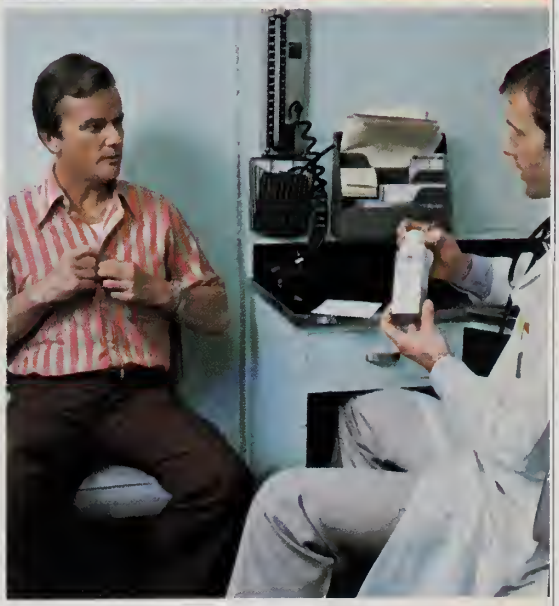


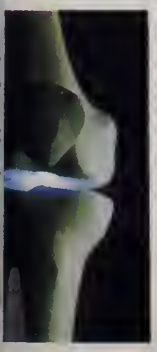

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**Indications and Usage:** Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

**Contraindications:** Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

**Warnings:** Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

**Precautions:** Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

**Drug interactions.** *Aspirin* used concomitantly may decrease Motrin blood levels. *Coumarin:* Bleeding has been reported in patients taking Motrin and coumarin.

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**Gastrointestinal:** The most frequent type of adverse reaction occurring with Motrin (ibuprofen) is gastrointestinal (4% to 16%). This includes nausea*, epigastric pain*, heartburn*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness*, headache, nervousness. **Dermatologic:** Rash* (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

Incidence: Unmarked 1% to 3%; *3% to 9%.

*Incidence less than 1 in 100*

**Gastrointestinal:** Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

*Causal relationship unknown*

**Gastrointestinal:** Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

**Overdosage:** In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

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# SPECIAL ARTICLES

## Summary of Recent Actions of the Florida Board of Medical Examiners

George S. Palmer, M.D.

**(Editor's Note: The Florida Board of Medical Examiners, consisting of licensed physicians, is the State agency charged with implementation and enforcement of Chapter 458, Florida Statues, commonly known as the Medical Practice Act. Its major duties include licensing physicians to practice in Florida either by examination or endorsement; investigaton of violations; and certification of physician's assistants. In this issue of *The Journal* we begin regular publication of summaries of the Board's actions.)**

**Board of Medical Examiners Report**
**Bal Harbour**
**July 21-25, 1978**

The Board held its quarterly meeting at the Americana Hotel, Bal Harbor, July 21-25, 1978. The meeting included board business, receiving recommended orders, administrative denial petitions, appearances or presentations on request, approval of licensure by endorsement, appearance of physicians on probation, registration of applicants for licensure by examination, and conducting licensure examinations.

Thirteen recommended orders were presented to the Board, each order the result of an administrative hearing. The results were as follows:

1. Hugh J. Connolly, M.D., Miami — Reprimanded — two year probation.
2. Monroe I. Scheiner, M.D., Miami — Reprimanded — two year probation.
3. Richard L. Lipman, M.D., Miami — Reprimanded — two year probation.
4. Leonard L. Weil, M.D., Miami Beach — Reprimanded — two year probation.
5. Michael A. Cogan, M.D., North Miami — Reprimanded — two year probation.
6. Maxwell Gould, M.D., Tamarac — Reprimanded — three year probation.
7. Joseph L. Lester, Jr., M.D. Key West—Board of Medical Examiners enjoined from further proceedings or charges by District Court of Appeals order.
8. Anthony J. Moore, M.D., Orlando, license revoked, revocation stayed, three year probation, terms and conditions.
9. Rupert Don Bryan, M.D., Pensacola — Recommended order rejected; each Board Member to review record; Agenda for October meeting.
10. Lester H. Blackburn, M.D., Sarasota — license suspended, suspension stayed for two year term with conditions.
11. Maurice Jewell, M.D. Lake Butler — license revoked.
12. Maurice C. Guest, M.D., Tampa — license revoked, revocation stayed — three year probation, terms and conditions.
13. G. Leonard Gioia, M.D., Merritt Island — license revoked. Revocation stayed. Five year probation, terms and conditions.

Three interim orders were presented with these results:

1. James Kelly, M.D., Stuart — Emergency suspension of license remains in effect pending plan of supervised practice satisfactory to Board.
2. John H. Anderson, M.D., Orlando — Emergency

suspension of license remains in effect pending resolution of several problems.

3. Stuart Joel Friedman, M.D. prohibited from practicing medicine in Florida. May have administrative hearing upon full reinstatement of his New Jersey license.

Seven physicians appeared because of administrative denials to take licensure examinations. Six administrative denials were sustained by the Board. One physician was granted permission to take the examination.

Nineteen physicians on probation made their required semi-annual appearance before the Board. One physician was excused because of illness. Before their Board appearance all of these physicians on probation participated in a one-hour group session conducted by psychiatrist Board Member, Dr. Robert Steele of Sarasota. Dr. Steele initiated these sessions about two years ago and he feels that all of the probationers have benefited and have helped each other.

Six hundred two (602) licenses by endorsement were approved by the Board. Three hundred forty-two (342) of these were with National Board and two hundred sixty (260) with the FLEX examination in another state.

Six hundred eighty-two (682) applicants took the Florida licensure examinations in English and eighty-one (81) applicants took the examination in Spanish.

Other actions, discussions, recommendations, etc:

**Physician's Assistants, Advanced Nurse Practitioners and Prescriptions** — neither PA's nor nurse practitioners have the statutory authority to execute prescriptions. In the case of the PA the doctor to whom the PA is certified must execute the prescriptions. Physicians should not leave pre-signed prescriptions for PA's or anyone else to fill in. An information sheet will be furnished to physicians certified to have PA's defining the role of the PA and what he/she can and cannot do. The members from the Board of Medical Examiners on the joint advisory committee on Nurse Practitioners continue to work with the members from the Nursing Board on delineating the role of and activities of Nurse Practitioners.

**Executive Director** — the Board reprimanded the Executive Director for quotes attributed to him in a series of articles in the Miami Herald, and accepted his apology. An Ad Hoc Committee was appointed to assist the Executive Director in defining his activities and determining where the Board members could properly assume certain responsibilities. Drs. Carson, McIntosh and Messenger were appointed and they will elect their own chairman.

**Florida Orthopedic Society** — the report of the FOS on monitoring the practice of orthopedic surgery in Key West for a one year period ending May 1978 was received. Recommendations of the report: no disciplinary action indicated; no effective Peer Review can be conducted in the field of orthopedic surgery from within Monroe County Medical Society at the present time. Continuing Peer Review of surgery involving the neck, the spine and replacement of major joints should be continued on a less frequent basis; the surgeons involved should seek a prior formal consultation from outside the county in those patients in whom elective surgery is contemplated in the areas mentioned. The Board expressed great appreciation to the Florida Orthopedic Society and the Ad Hoc Peer Review Committee chaired by Dr. James F. Richards, Jr., for their great amount of time, travel, work and dedication in assisting the Board of Medical Examiners in this difficult task. It is definitely in the public interest and of benefit to the citizens of Monroe County.

**Laetrile** — Dr. Robert Steele reported back to the Board on his charge to determine the legislative intent behind the bill. He stated that the legislative intent as to whether the substance is "harmful" means direct toxicity. The Board continued to keep their motion that laetrile be declared harmful tabled. The motion was made and tabled at the April meeting.

**Advertising by Physicians** — proposed rules of the Ad Hoc Committee were approved for advertising and public hearing if one is requested.

**Prosecuting Attorney** — Board approved the retaining of a prosecuting attorney to handle Board administrative hearings and an interview committee composed of Drs. Brill, Webster and Messenger was appointed. (Note: Shortly after the July meeting the committee selected Richard C. McFarlain of Tallahassee as Board prosecuting attorney. Present Board legal counsel, Michael Schwartz will devote all of his time and activities as legal counsel and legal adviser to the Board.)

**Broward County Medical Association** — William Stafford, Executive Director, Broward County Medical Association, appeared to discuss the question of supervision of Physician's Assistants and what is responsible supervision. Also discussed was the use of PA's in high population areas and in hospitals. He felt PA's are used in Broward as physicians. Dr. Vincent Corso, FMA Judicial Council, participated in the discussion. This matter was referred to the newly established Ad Hoc Committee on PA's composed of Drs. Carson, Brill and Cole.

**Brevard County Medical Society** — Drs. Burton Podnos, Richard Baney and William Broussard appeared and Dr. Broussard, as spokesman for the Board of Governors of Brevard County Medical Society, made a presentation criticizing the matter in which an Administrative Hearing was conducted involving a

member of their society and making certain recommendations. A general discussion followed.

**Physicians on Probation** — the Board recommends that county medical societies and the FMA allow M.D.'s on probation by the Board to retain some type of membership. The reasons for this are to prevent isolation of the physician, to keem him/her visible continue peer observation and association and participation in the affairs and activities of organized medicine. All of this should enhance the rehabilitative process and increase the prospects of a return to full professional status.

## Board of Medical Examiners Report
## Jacksonville
## October 21 - 22, 1978

The Board held its quarterly meeting at the Jacksonville Hilton Hotel, October 21-22, 1978. The meeting included Board business, action on recommended orders, appearances or presentations on request and approval of licensure by endorsement.

Seven recommended orders were presented. The results were as follows:

1. Dale L. Osterling, M.D., Inverness — reprimanded.
2. Jose M. Parejo, M.D., West Palm Beach — license revoked, revocation stayed, two year probation, terms and conditions.
3. William M.C. Wilhoit, M.D., Pensacola — license revoked.
4. Rupert Don Bryan, M.D., Pensacola — license revoked, revocation stayed, license suspended for 180 days, educational and clinical training requirements, then practice for one year in a structured environment.
5. Fahmy M. Rizk, M.D., Ft. Myers Beach — license suspended two years.
6. Robert M. Akey, M.D., Lakeland — license relinquished to Board with prejudice.
7. William R. Murphy, M.D. — License relinquishd to Board.

Two interim orders were considered in follow-up:

1. James Kelly, M.D., Stuart
2. John H. Anderson, M.D., Orlando

When plans on these physicians have been submitted to hearing officers, hearings will be convened and recommended orders filed.

Two physicians appeared because of administrative denials for licensure. One was granted permission to take the licensure examinations in January 1979. After discussion and consideration of the other physician the Board voted to issue him a license by endorsement.

One physician appeared on request after failing the July 1978 licensure examination with a grade of 73.8. He made an appeal for the Board to grant him a license citing personal circumstances. The appeal was denied.

Edward Rossario, M.D., Daytona Beach. Request of modification of terms of probation denied.

Donald R. Dunlap, M.D., Winter Park — probation ended.

Two hundred and sixty eight (268) licenses by endorsement were approved by the Board. One hundred and forty two (142) of these were with National Board and one hundred and twenty six (126) with the FLEX examination in another state.

During 1978 the Board has issued 715 licenses by examination and 1325 licenses by endorsement for a total of 2040 licenses issued.

Other actions, discussions, recommendations, etc.:

**Executive Committee of Lake Shore Hospital Medical Staff, Lake City** — Represented by attorney Martin S. Page presented a grievance concerning the contents of the transcript of the Board's administrative hearing on Jerry J. Nemecek, M.D., Lake City of July 20, 1977 and the final order against Dr. Nemecek. The Board decided to delete portions of the recommended order and to adopt a policy that in all future Board hearings involving action based on disciplinary action taken against a physician by a hospital staff or other organized medical groups that these groups be notified of the date and place of the hearings and have an opportunity to testify if they desire.

**Rules** — Changes in the administrative rules of the Board as proposed will be filed with the Secretary of State. There was no request for a public hearing on these.

**Advertising by Physicians** — Joe Jacobs, Esquire, representing the Florida Association of Broadcasters made a presentation regarding inclusion of the electronic media in our advertising rule subject to the same restrictions as would apply to the printed electronic media. The Board authorized a modification

of its existing rule to include the electronic media. The Board also wished certain language in the rule modified which would place a duty upon the physician advertising in the electronic media to keep for inspection and review the tape of said advertisement.

**Legislation** — The Board legislative Ad Hoc Committee presented suggested changes and additions to the Medical Practice Act. These would aid the Board in acting more effectively and efficiently administratively and in disciplinary functions. These proposed legislative amendments are being sent to FMA legal counsel and Council on Legislation and Regulations.

**FLEX Examination** — In June 1979 the Board will begin using the FLEX as the Examination for medical licensure in Florida.

**Medical Education Course in Spanish and Licensure Examination** — It was determined that another course in Spanish would be offered in 1979. However, no assurance would be given to those attending that course that the exam following the course would be offered in Spanish. That would depend entirely upon whether FLEX would allow the examination to be translated in the Spanish language.

**Physician's Assistants** — The Executive Director is preparing information on proper utilization of Physician's Assistants and Do's and Dont's regarding them. This is to be sent to each physician who employs a PA. The Board Ad Hoc Committee on Physician's Assistants has approved this and is keeping in close touch with the PA program at Santa Fe Community College, University of Florida College of Medicine in Gainesville. The Committee met recently with David Lewis, Ed.D., Program Director, James Konopa, P.A. -C, Assistant Director, and Randy Bennett, P.A. -C, Clinical Coordinator.

**Future Board Meetings** — January 19-21, 1979 — Riverside Hilton Inn, Tampa; April 21-22, 1979 — Capitol Inn, Tallahassee; June 8-10, 1979 — Americana Hotel, Bal Harbour.

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**OFF TO AN EARLY START . . .**

***THIRTEENTH ANNUAL AUXILIARY BENEFIT ART SHOW***

**SHOW TIME — MAY 1979 — WILL SOON BE HERE!**
**PLEASE PLAN NOW TO ENTER**
**EVERYONE IS WELCOME — DOCTORS, WIVES AND CHILDREN**
**YOU MAY HAVE MORE TALENT THAN YOU REALIZE**
**THERE WILL BE AWARDS IN:**

1. **PAINTING — oil, acrylic, casein, collage, watercolor, pastel, etc.**
2. **GRAPHICS — pen and ink, charcoal, photography, etc.**
3. **CRAFTS — sculpture, pottery, ceramics, mosaic, weaving, jewelry, etc.**

**THERE WILL BE AN ENTIRELY SEPARATE AWARD — CHOSEN BY A SPECIAL COMMITTEE — "THE EDITOR'S AWARD." THE WINNING WORK OF THIS SPECIAL AWARD WILL BE USED ON THE COVER OF A FUTURE ISSUE OF THE FMA JOURNAL.**

**IF YOU HAVE ANY QUESTIONS PLEASE CONTACT MRS. JAMES D. MOODY, SHOW CHAIRMAN, 4584 Lake Holden Hills Drive, Orlando, Florida 32809.**

# Jackson Memorial Hospital's Cost Containment Campaign

**James F. Richards Jr., M.D.**

The Florida Medical Association has accepted a commitment to contribute to the control of the cost of medical care in our State. Almost four years ago, FMA President Vernon B. Astler, M.D. appointed a Committee on the Cost of Medical Care composed of physicians, members of the insurance industry and hospital administrators. Through his administration and the succeeding administrations of Jack A. MaCris, M.D. and Louis C. Murray, M.D., the committee functioned, identifying areas in which the medical profession and the hospitals themselves have some control and input in reducing the cost of medical care.

In January 1978, that committee was abolished in lieu of a broader based committee, including members of FMA, FHA, Health Insurance Council, Florida League of Hospitals and Blue Cross - Blue Shield.

It became quickly apparent to the members of the committee, both physicians and non-physicians, that controlling the cost of medical care in the United States is not just a problem of doctors and hospitals, but is a **people problem** and will require the cooperation and understanding, not only of the doctors and hospitals, but also of the public at large. Not only must doctors be alert to reduce and avoid unnecessary hospitalization days and unnecessary diagnositic and therapeutic procedures, but we must encourage the people of our State and our country to improve their own lifestyles. Our health as a people will improve and our hospitalizations and medical costs will decrease if we exercise our bodies and reduce our smoking, our alcoholic intake, our general stress, and our reckless driving, which kills 50,000 Americans annually, injuring even thousands more!

We congratulate the Jackson Memorial Hospital on this cost containment campaign. This is an effort on the part of Jackson Memorial Hospital to educate its young doctors regarding the cost of medical procedures and supplies and to make them more aware of the cost. They also have provisions to help educate the local public by newspaper, TV and radio spots. Some of us can remember the days when the star pupil was the medical student who could fill the order page the most completely. We feel today's medical student and physician must be able to justify each order written and recognize that each order carries with it a price tag contributing to the cost of medical care.

Here, in summary form, is the Jackson program:

**Education**

1. House Staff member will be issued rate and charges manual associated with those areas of his or her concern.
2. New House Staff will receive an orientation to Cost Containment every July.
3. Patient bills will be randomly placed on medical charts for review by Attendings and House Staff Officers on Rounds.
4. Costs of tests are to be placed on the vouchers that physicians sign.
5. Attending Staff will be involved in Cost Containment Education including departmental meetings. Members of the Hospital Finance Department could attend and provide relevant information at these meetings.
6. Lectures are to be provided to medical students on Cost Containment.
7. House Staff will distribute newsletter and memos concerning Cost Control and Awareness information.
8. House Staff will continue to participate on all committees in the hospital that have an effect on cost control and/or awareness.
9. Individual departmental House Staff meetings concerning Cost Control and Awareness will be held.
10. The Finance Department will meet with each House Staff department in order to discuss rates and charges in their areas as well as cost control and cost awareness.
11. The House Staff Steering Committee will continue to direct the efforts noted above.

**Research**

1. Pilot studies focused on accountability for medical supplies used and tests ordered will be completed and results published.
2. Surveys of House Staff to assess their attitudes and awareness of costs will be continued.
3. The House Staff will promote ongoing surveys of physicians, nurses, technicians, and aides directed at disclosing areas of wastefulness or potential improvements.
4. A computer audit in conjunction with Hospital Administrators will be designed to assess success of the entire program.

**Publicity**

1. Campaign Buttons
2. Campaign stickers on charts
3. Media coverage
   a) House Staff, Hospital, University Newsletter
   b) Local and City Newspaper, T.V., Radio

**Action**

1. Attempt to reduce redundant orders throughout the hospital; e.g., required admission orders should not be redone by the House Staff, but they were not aware that x-rays and lab work were automatically done on all OPC admissions. Increase the efficiency of the file room because physicians automatically reorder x-rays as they feel the originals will never be found.
2. Pursue discharge planning and make sure that all patients are discharged twenty-four hours ahead of time.
3. Increase the five-day limit on tests prior to surgery so that outpatient exams can be performed within two to three weeks of surgery, therefore, hopefully reducing the length of stay by one day.

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Dr. Richards is Chairman of the FMA Council on Medical Economics.

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# Right to Refuse or Discontinue Medical Care

**Florida's Fourth District Court of Appeal has ruled in a case of first impression that a competent adult patient has the right to refuse or discontinue medical treatment based upon the constitutional right of privacy.**

**The court rejected notions that the State's interest in preserving life, protecting third parties, preventing suicides and helping maintain the ethical integrity of medical practice outweigh the individual wishes of the patient and his constitutional right of free choice and self determination.**

**Abe Perlmutter, the patient, was suffering from amyotropic lateral sclerosis, and while mortally sick he remained in command of his mental faculties. The Court stressed in its decision that Mr. Perlmutter's legal competency was an important consideration in arriving at its decision, thus leaving unsettled the question involving patients who are incapable of understanding.**

# Florida's Measles Emergency — Old Disease, New Problem
# The Changing Epidemiology of Measles

**E. Charlton Prather, M.D.**

The incidence of measles in Florida has increased at an alarming rate of about 400% during 1978. A total of 1,147 cases had been reported for the year as of December 8, 1978, in contrast to 308 for all of 1977. All sections of the state have reported cases. Since the beginning of October, there have been measles outbreaks in Broward, Dade, Escambia, Manatee, Highlands, and Lake Counties. Sixty-eight percent of the measles cases reported have been in persons 10 to 19 years of age, with an additional five percent in those twenty and older. The average age is 14.

Health officials estimate that some 510,000 persons up to age 24 are susceptible to measles. Without mass immunization in this target age group, widespread outbreaks in Junior high and High schools will continue to occur; and the problem will increase in young adult populations.

The HEW Public Health Service Advisory Committee on Immunization Practices has made the following recommendations:

1. **That persons be considered immune to measles only if they have documentation of physician diagnosed measles or laboratory evidence of measles immunity, or adequate immunization with live measles vaccine when 12 or more months of age. (Most persons born prior to 1957 have been infected naturally and generally need not be considered susceptible). All others should be considered susceptible and vaccinated unless otherwise contraindicated.**
2. **That measles vaccine be given routinely to all children at 15 months of age.**
3. **That the immune status of all adolescents be evaluated. Those who received inactivated vaccine (available from 1963 to 1967) or who were given live measles vaccine before they were 12 months of age should be considered susceptible along with those who have no history of either measles or measles vaccine. Susceptible persons should be revaccinated.**
4. **That persons unaware of their age at the time of vaccination or who were vaccinated prior to 1968 with a vaccine of unknown type should be revaccinated.**
5. **That persons who received live vaccine within three months after receiving inactivated measles vaccine should be revaccinated.**
6. **That revaccination creates no enhanced risk for anyone who has previously received live measles vaccine or had measles.**

The Immunization Program in Florida is recommending that measles outbreak control programs be implemented in Middle schools, Junior high, and High schools on a county-wide basis when outbreaks occur. All students who cannot readily provide a **documented** history of measles or of vaccination with live measles virus vaccine when more than 12 months of age should be vaccinated or excluded from school.

The State School Health Medical Advisory Committee has endorsed the DHRS Immunization Program's position on measles outbreak control. This committee also recommends developing a program to require mandatory proof of measles vaccine before the beginning of the 1979-80 school year.

Florida Medical Association's Public Health Committee has endorsed the outbreak control programs for the remainder of the 1978-79 school year. It also recommended implementing **AS FEASIBLE** a program to require measles immunization in the upper grades beginning with the 1979-80 school year.

Physicians are urged to check the immunization status of their patients for measles and to vaccinate or revaccinate those patients considered susceptible. Detailed recommendations and revised immunization schedules are being forwarded to physicians by mail.

For further information contact Immunization Program Office, DHRS (904) 487-2755.

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Dr. Prather is State Health Officer, Health Program Office, DHRS, Tallahassee.

# the Sarasota Medical Awards Conference

Sarasota, Florida
April 26-29, 1979

## "The Impact of Basic Research Today on Clinical Medicine Tomorrow"

***Featuring presentations by the 1979 recipients of the Sarasota Medical Awards for Achievement and Excellence***

*A rare opportunity to share ideas and exchange concepts with four of the best minds in medicine and their peers.*

*Developed in association with the College of Medicine, University of Florida; the School of Medicine, University of Miami, and the College of Medicine, University of South Florida.*

***S. Philip Bralow, M.D.***
*Medical Coordinator*

***"Radioimmunoassay: Its Relevance to Clinical Medicine"***

***Nobel Laureate***
***Rosalyn S. Yalow, Ph.D.***
*Senior Medical Investigator*
*Veterans Admin. Hospital*
*Bronx, New York*

***"Immunologic Factors in Cancer and Other Diseases"***

***Robert A. Good, M.D., Ph.D.***
*President and Director*
*Sloan-Kettering Institute for Cancer Research*
*New York, New York*

***"Molecular Cloning of Genetic Elements: Implications for Basic and Medical Science"***

***Paul Berg, Ph.D.***
*Willson Professor of Biochemistry*
*Stanford University*
*School of Medicine*
*Stanford, California*

***"Ischemic Myocardial Failure: Its Mechanism Treatment and Prevention"***

***Eugene Braunwald, M.D.***
*Hersey Professor and Head*
*Department of Medicine*
*Harvard Medical School*
*Boston, Massachusetts*

### Panels and Panelists

***"The Impact of Radioimmunoassay on Early Diagnosis and Therapy"***

***James E. McGuigan, M.D.***
*Chairman*
*Dept. of Medicine*
*University of Florida*
*College of Medicine*

***Eric Reiss, M.D.***
*Acting Chairman*
*Dept. of Medicine*
*University of Miami*
*School of Medicine*

***Allen W. Root, M.D.***
*Professor*
*Dept. of Pediatrics*
*University of South Florida*
*College of Medicine*

***"Immunologic Control of Carcinogenesis and its Future in Therapy"***

***Henry Gewurz, M.D.***
*Coogan Professor and Chairman*
*Dept. of Immunology*
*Rush University*
*College of Health Sciences*
*Chicago, Ill.*

***Roy S. Weiner, M.D.***
*Associate Professor of Immunology and Medical Microbiology*
*University of Florida*
*College of Medicine*

***C. Gordon Zubrod, M.D.***
*Director*
*Comprehensive Cancer Center for the State of Florida*
*University of Miami*
*School of Medicine*

***"Is Genetic Surgery (Gene Therapy) a Plausible Approach to the Treatment or Prevention of Genetic Disease?"***

***Kenneth I. Berns, M.D., Ph.D.***
*Professor and Chairman*
*Dept. of Immunology and Medical Microbiology*
*University of Florida*
*College of Medicine*

***Karl H. Muench, M.D.***
*Professor of Medicine and Biochemistry*
*Dept. of Medicine*
*University of Miami*
*School of Medicine*

***Thomas A. Tedesco, Ph.D.***
*Assistant Professor and Director*
*Genetics Division*
*Dept. of Pediatrics*
*University of South Florida*
*School of Medicine*

***"The Future for Coronary By-Pass Surgery"***

***C. Richard Conti, M.D.***
*Professor of Medicine*
*Division of Cardiology*
*University of Florida*
*College of Medicine*

***Gerard A. Kaiser, M.D.***
*Daughtry Professor and Chief*
*Division of Thoracic and Cardiovascular Surgery*
*University of Miami*
*School of Medicine*

***Edward Spoto, Jr., M.D.***
*Associate Professor and Chief*
*Cardiology Section*
*University of South Florida*
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This continuing Medical Education offering meets the criteria for 12 hours of credit in Category 1 for the Physicians Recognition Award of the American Medical Association and the American Academy of Family Physicians.

### Come to Sarasota in April

Located right on the Gulf of Mexico about midway down the Florida peninsula, Sarasota is one of the most charming cities in America. A popular winter resort, Sarasota is also known as the cultural center of Florida, embracing museums, theatre, music and other performing and visual arts. The sugar-white beaches and deep-sea fishing are famous throughout the world. Come to Sarasota in April.

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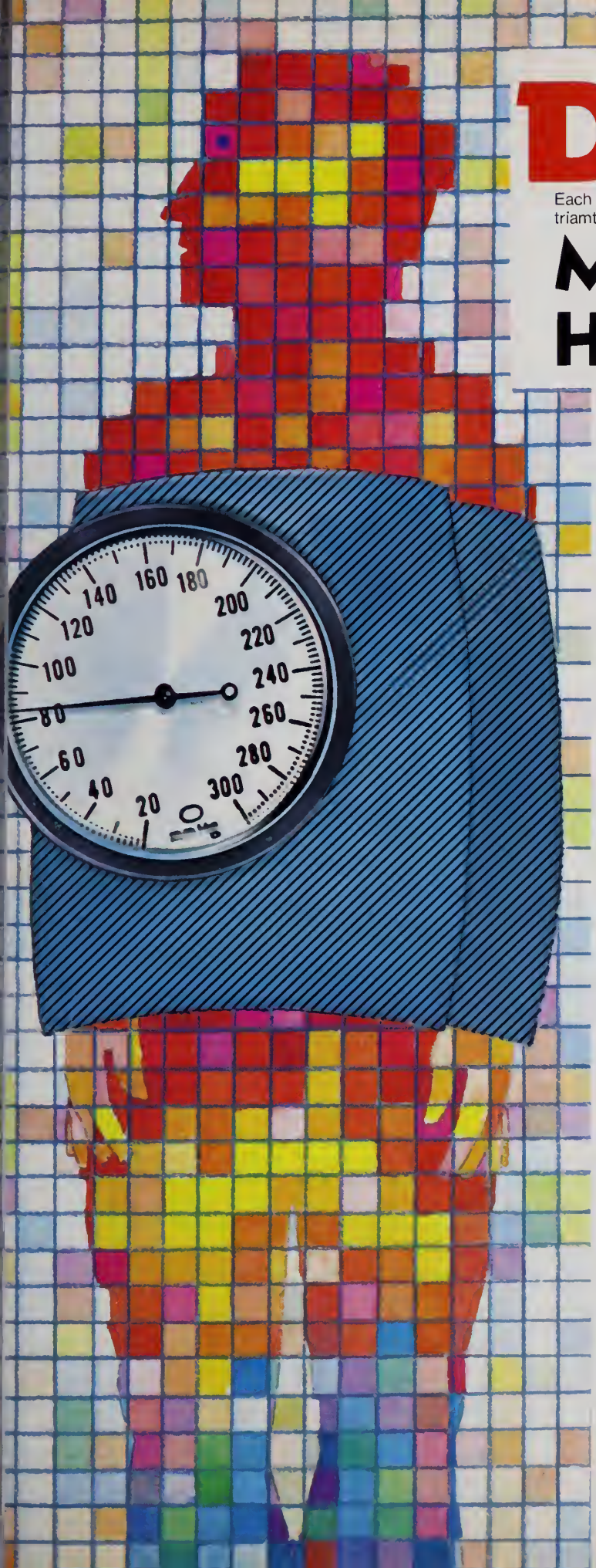
*For complete information, contact:*
***Charles R. Estill***
*President*



# Dyazide®

Each capsule contains 50 mg. of Dyrenium® (brand of triamterene) and 25 mg. of hydrochlorothiazide.

# Makes Sense in Hypertension*

**Before prescribing, see complete prescribing information in SK&F Co. literature or *PDR*. A brief summary follows:**

* **Warning**
This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

**Contraindications:** Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

**Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired.** If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K+ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

**Precautions:** Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spironolactone is used concomitantly, determine serum K+ frequently; both can cause K+ retention and elevated serum K+. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine.

**Adverse Reactions:** Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

**Supplied:** Bottles of 100 and 1000 capsules; Single Unit Packages of 100 (intended for institutional use only).

**SK&F CO.**
a SmithKline company
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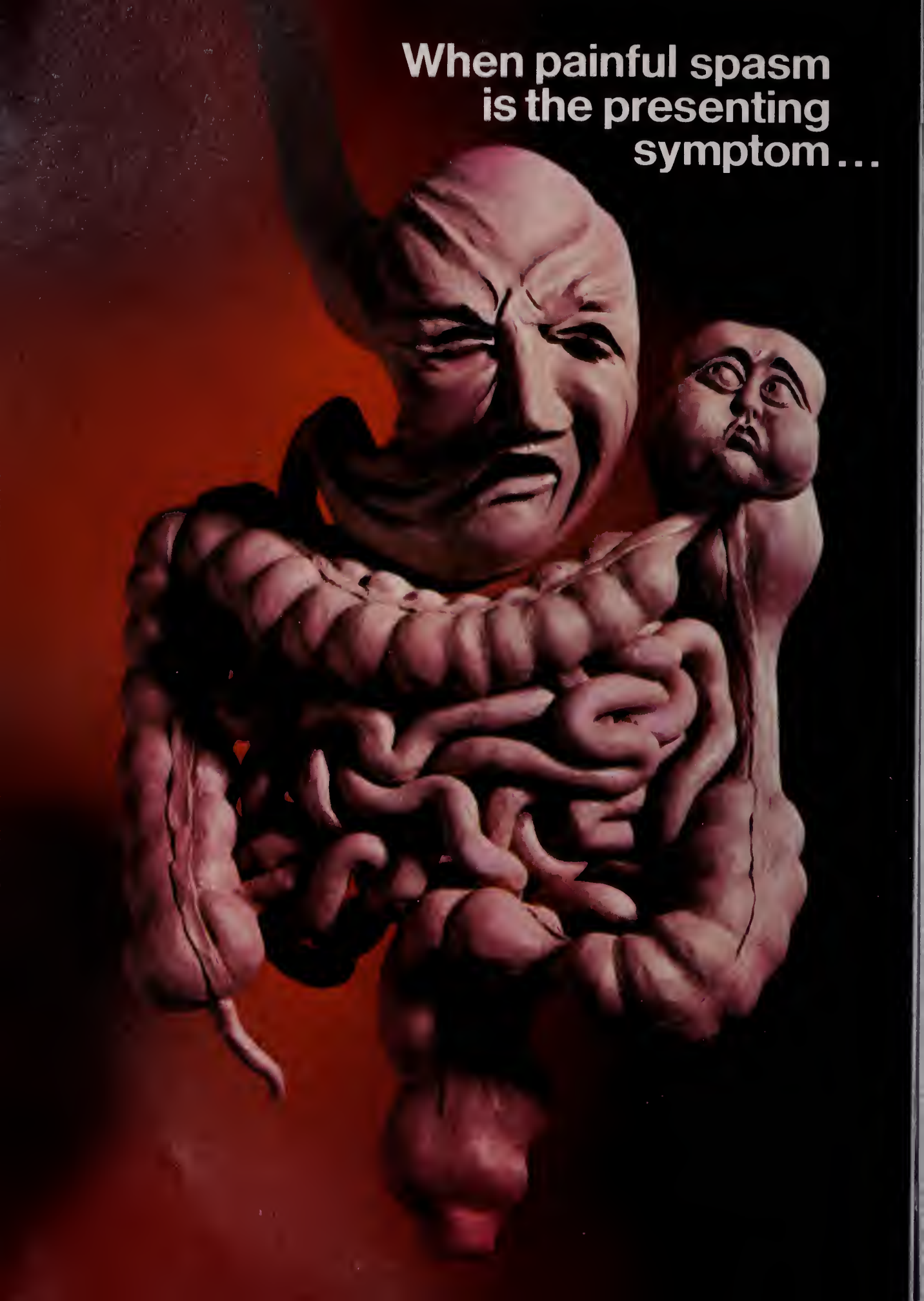

When painful spasm
is the presenting
symptom...

. . in functional G.I. disorders*

# Bentyl®

## (dicyclomine hydrochloride USP)

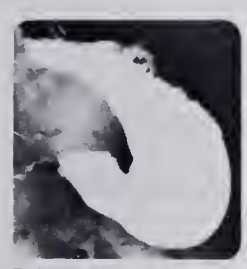
10 mg. capsules, 20 mg. tablets,
10 mg./5 ml. syrup, 10 mg./ml. injection

helps control abnormal motor activity
with minimal anticholinergic side effects†

Demonstrated smooth muscle relaxant activity.

In this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

. . . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.



Pylorospasm has almost totally blocked passage of barium meal.

Barium meal beginning to pass 10 minutes after intramuscular injection of 20 mg. Bentyl.

*"The correlation of spasm relief and drug given was excellent."*

*This drug has been classified "probably" effective in treating certain functional G.I. disorders.

†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:
King, J.C. and Starkman, N M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964

**Merrell**

8-3497 (Y515A)

# Bentyl®

## (dicyclomine hydrochloride USP)

Capsules, Tablets, Syrup, Injection
AVAILABLE ONLY ON PRESCRIPTION.

Brief Summary
INDICATIONS
For use as adjunctive therapy in the treatment of peptic ulcer.
IT SHOULD BE NOTED AT THIS POINT IN TIME THAT THERE IS A LACK OF CONCURRENCE AS TO THE VALUE OF ANTICHOLINERGICS/ANTISPASMODICS IN THE TREATMENT OF GASTRIC ULCER. IT HAS NOT BEEN SHOWN CONCLUSIVELY WHETHER ANTICHOLINERGIC/ANTISPASMODIC DRUGS AID IN THE HEALING OF A PEPTIC ULCER, DECREASE THE RATE OF RECURRENCES, OR PREVENT COMPLICATION

Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the following indications as "probably" effective:

May also be useful in the irritable bowel syndrome (irritable colon, spastic colon, mucous colitis, acute enterocolitis, and functional gastrointestinal disorders); and in neurogenic bowel disturbances (including the splenic flexure syndrome and neurogenic colon).

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

CONTRAINDICATIONS: Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient; unstable cardiovascular status in acute hemorrhage; severe ulcerative colitis; toxic megacolon complicating ulcerative colitis; myasthenia gravis. WARNINGS: In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. PRECAUTIONS: Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with: autonomic neuropathy; hepatic or renal disease; ulcerative colitis—Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon; hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension; hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.
It should be noted that the use of anticholinergic/antispasmodic drugs in the treatment of gastric ulcer may produce a delay in gastric emptying time and may complicate such therapy (antral stasis). Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. ADVERSE REACTIONS: Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention; blurred vision and tachycardia; palpitations; mydriasis; cycloplegia; increased ocular tension; loss of taste; headache; nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. DOSAGE AND ADMINISTRATION: Dosage must be adjusted to individual patient's needs.
*Usual Dosage* Bentyl 10 mg. capsule and syrup: *Adults:* 1 or 2 capsules or teaspoonfuls syrup three or four times daily. *Children:* 1 capsule or teaspoonful syrup three or four times daily. *Infants.* ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg.: *Adults.* 1 tablet three or four times daily. Bentyl Injection: *Adults:* 2 ml. (20 mg.) every four to six hours intramuscularly only. NOT FOR INTRAVENOUS USE. MANAGEMENT OF OVERDOSE: The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine® (bethanecol chloride USP) should be used
Product Information as of October, 1976

**Merrell**
MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc
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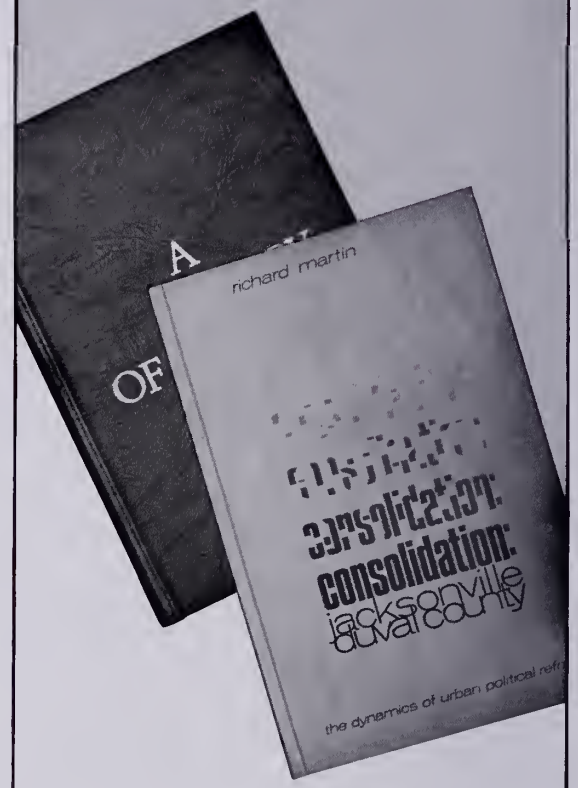


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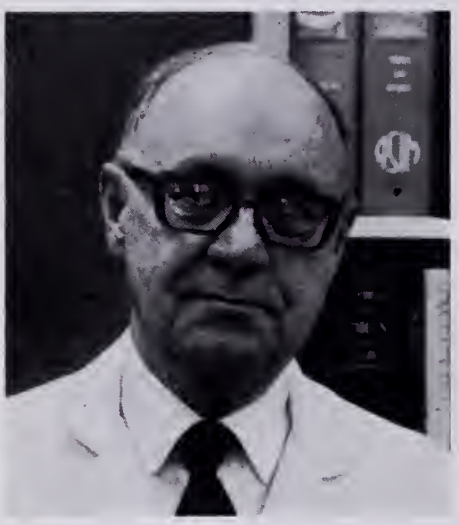
*—Dr. William Felts, Past President, American Society of Internal Medicine*



More and more physicians today are beginning to realize the extent of the economic influence they have, and are finding ways of holding costs down.

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**PATIENT CARE Magazine—Outlook 1977, "Face-Off: Cost Containment vs. Chaos," January 1, 1977.*

*Lyle CB, et al. "Practice habits in a group of eight internists," ANNALS OF INTERNAL MEDICINE 84 (May 1976), 594-601.*

*Schroeder SA, et al. "Use of laboratory tests and pharmaceuticals: variation among physicians and effect of cost audit on subsequent use," JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION 225 (Aug. 20, 1973), 969-73.*

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# ORGANIZATION

## Annual Meeting Scientific Assemby To Have Three Sections on Wednesday

Early arrivals at the 105th Annual Meeting of the Florida Medical Association will have three different scientific programs to choose from on Wednesday afternoon, May 23.

Calvin W. Martin, M.D., of Arcadia, Acting Chairman for the Scientific Program, said the Section on Emergency Medicine and a Section on Basic Life Support Certification have been added to the Wednesday afternoon program. Previously, it was announced that a Section on Cancer and Nutrition, also would be on Wednesday afternoon.

Attendance at the Section on Basic Life Support Certification will require advance registration by mail. Attendance will be limited to 60, and those wishing to participate should contact Mr. Garry L. Briese, Executive Director, Florida Chapter, American College of Emergency Physicians, 600 Courtland Street, Suite 420, Orlando, Fla. 32804.

According to Dr. Martin, application will be made to the Florida Medical Foundation for certification of the scientific program for 20 hours of AMA Category I Credit.

The Annual Meeting will be conducted May 23-27, 1979 at the Diplomat Hotel in Hollywood.

The following programs have been announced in the past month:

**WEDNESDAY AFTERNOON — MAY 23**

SECTION ON EMERGENCY MEDICINE
(Co-sponsored by Florida Chapter, American College of Emergency Physicians)
Wednesday—1:00 p.m. to 4:15 p.m.
George Musser, M.D., Miami
Program Chairman

"Mushrooms: Poisonings and Hallucinations," Kenneth Lampe, M.D., Department of Pharmacology, University of Miami School of Medicine, Miami.

"Street Drugs: Current Problems," James McKuen, Executive Director, Up-Front, Inc. (an Information and Education Program on Drugs), Miami.

"Ciguatera (Fish) Poisoning," Arthur Anderson, M.D., Department of Emergency Medicine, Imperial Point Hospital, Fort Lauderdale.

"The Management of Phencyclidine Overdoses," George Musser, M.D., Department of Emergency Medicine, Cedars of Lebanon Hospital, Miami.

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SECTION ON BASIC LIFE SUPPORT CERTIFICATION
(Co-sponsored by Florida Chapter, American College of Emergency Physicians, in Cooperation with the Heart Association of Greater Miami)
Wednesday—1:00 p.m. to 4:15 p.m.

Basic life support is an emergency first aid procedure that consists of the recognition of respiratory and cardiac arrest and starting the proper application of cardiopulmonary resuscitation to maintain life until a victim recovers sufficiently to be transported or until advanced life support is available.

The 1976 FMA House of Delegates encouraged all Florida physicians to become certified in life support. A registrant who successfully completes this session will receive certification in basic life support from the American Heart Association.

This course is practical in nature and registrants should be prepared to participate actively. A demonstration of practical skills is a prerequisite for successful completion and certification.

Admission to this session is by advance registration, and only 60 participants can be accommodated. Preference in registration will be given to physicians, with spouses and other family members accepted on an available-space basis after April 15, 1979.

Physicians wishing to attend this session should notify Mr. Garry L. Briese, Executive Director, Florida Chapter, American College of Emergency Physicians, 600 Courtland Street, Suite 420, Orlando, Fla. 32804.

## FRIDAY AFTERNOON — MAY 25

SECTION ON THORACIC AND CARDIOVASCULAR SURGERY
(Co-sponsored by Florida Society of Thoracic and Cardiovascular Surgeons)
Friday—1:30 p.m. to 4:00 p.m.
Richard G. Connar, M.D., Tampa
Program Chairman

"Current Concepts in the Management of Chest Trauma," Watts R. Webb, M.D., Professor and Chairman, Department of Surgery, Tulane University School of Medicine, New Orleans, La.
Questions and Answers
"Update Coronary Artery Surgery," Dennis F. Pupello, M.D., Director of Cardiac Surgery, Tampa General Hospital, Tampa.
"Surgical and Pharmacological Management of Acute Complications of Coronary Artery Disease," Watts R. Webb, M.D.
Questions and Answers
Adjournment

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## SATURDAY MORNING — MAY 26

SECTION ON OBSTETRICS AND GYNECOLOGY
(Co-sponsored by Florida Obstetric and Gynecologic Society)
Saturday—8:30 a.m. to 11:45 a.m.
James M. Ingram, M.D., Tampa
Program Chairman

"Nutrition in the Pregnant or Lactating Woman," WIlliam J. Darby, M.D., Ph.D., President, Nutrition Foundation, Inc., New York, N.Y.; and Professor of Nutrition, Department of Biochemistry, Vanderbilt University, Nashville, Tenn.
"Nutrition for the Now Generation," Howard Appledorf, Ph.D., Professor of Human Nutrition, Department of Food Science and Human Nutrition, University of Florida, Gainesville.
"Nutrition in the Teen-age and Post-menopausal Woman," William J. Darby, M.D., Ph.D.

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SECTION ON NEUROSURGERY
(Co-sponsored by Florida Neurosurgical Society)
Saturday—8:00 a.m. to 12:30 p.m.
Jack E. Maniscalco, M.D.,
Program Chairman

"Interactions with the State Legislature and the Florida Medical Association," Gerold L. Schiebler, M.D., Gainesville; David C. Lane, M.D., Fort Lauderdale; and Florida Medical Association Officers and Staff.
Coffee Break
Joint Symposium on Stroke (Co-sponsored by Florida Neurosurgical Society, Florida Society of Neurology, and American Heart Association, Florida Affiliate)
(Speakers to be Announced)
Adjournment

SECTION ON SURGERY
(Co-sponsored by Florida Chapter, American College of Surgeons, and Florida Association of General Surgeons)
Saturday—9:00 a.m. to 11:00 a.m.
Arthur K. Waltzer, M.D., Tampa
Program Chairman

"Newer Concepts and Update of Antibiotic Usage in the Practice of Surgery," Ronald Nichols, M.D., Department of Surgery, Tulane University School of Medicine, New Orleans, La.
Adjournment

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SECTION ON PLASTIC AND RECONSTRUCTIVE SURGERY
(Co-sponsored by Florida Society of Plastic and Reconstructive Surgery)
Saturday—8:00 a.m. to 10:00 a.m.
S. Anthony Wolfe, M.D., Miami
Program Chairman

"Microsurgery Update," Phillip George, M.D., Clinical Instructor in Plastic and Reconstructive Surgery, University of Miami School of Medicine; Hollis Caffee, M.D., Assistant Professor of Plastic Surgery, University of Florida College of Medicine, Gainesville; and Felix Freshwater, M.D., Resident, University of Miami School of Medicine, Miami.
"Breast Reconstructive Surgery Update," Walter Mullin, M.D., Clinical Instructor in Plastic and Reconstructive Surgery, University of Miami School of Medicine; Craig Bass, M.D., Clinical Instructor in Plastic and Reconstructive Surgery, University of Miami School of Medicine; Hollis Caffee, M.D., Assistant Professor of Plastic Surgery, University of Florida College of Medicine, Gainesville; and Claude Noriega, M.D., Clinical Assistant Instructor in Plastic and Reconstructive Surgery, University of Miami School of Medicine, Miami.
"Maxillofacial and Craniofacial Update," Mutaz Habal, M.D., Professor of Plastic Surgery, University of South Florida College of Medicine, Tampa; and S. Anthony Wolfe, M.D., Clinical Assistant Professor of Plastic and Reconstructive Surgery, University of Miami School of Medicine, Miami.
"A New Treatment for Congenital Giant Hairy Nevus," Dale Dubin, M.D., Tampa.
Adjournment

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**ON YOUR CALENDAR . . .**

**MAY 23-27, 1979**

**105TH ANNUAL MEETING**

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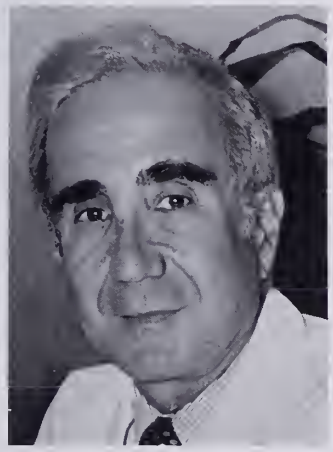
# Five Miami University Professors Receive National Recognition

Dr. Cleveland

Dr. Rowe



Dr. Scheinberg

Dr. Sussex

Five University of Miami School of Medicine professors have received recognition from national professional organizations in recent months.

William W. Cleveland, M.D., Professor and Chairman of the Department of Pediatrics, was named a Director of the American Board of Pediatrics.

Marc I. Rowe, M.D., Professor of Pediatrics and Surgery and Chief of the Division of Pediatric Surgery, was named Chairman of the Surgical Section of the American Academy of Pediatrics. He also is Chairman of the Pediatric Surgery Postgraduate Course, American College of Surgeons; and Vice Chairman, Pre- and Post-Operative Care Committee of the ACS.

Peritz Scheinberg, M.D., Professor and Chairman of the Department of Neurology, is the new President-Elect of the American Neurological Association. Previously, he served as Secretary-Treasurer of the organization.

James H. Sussex, M.D., Professor and Chairman of the Department of Psychiatry, is a director of the American Board of Psychiatry and Neurology.

In last month's issue of *The Journal,* there was a story about the election of Edward W. D. Norton, M.D., to the position of President-Elect of the American Academy of Ophthalmology. Dr. Norton is Professor and Chairman of the Department of Ophthalmology.

All are members of the Florida Medical Association.

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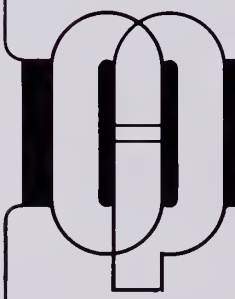

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Brief Summary
**INDICATION**: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.
**CONTRAINDICATIONS**: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).
**WARNINGS**: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. *Drug Dependence*: Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy*: Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children*: Tenuate is not recommended for use in children under 12 years of age.
**PRECAUTIONS**: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.
**ADVERSE REACTIONS**: *Cardiovascular*: Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System*: Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal*: Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic*: Urticaria, rash, ecchymosis, erythema. *Endocrine*: Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System*: Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous*: A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.
**DOSAGE AND ADMINISTRATION**: Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in midevening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.
**OVERDOSAGE**: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

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References: 1. Citations available on request — Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M. A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

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# Whether overweight is a complicating factor... or just uncomplicated overweight.

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### A useful short-term adjunct in an indicated weight loss program.

Overweight patients in certain diagnostic categories often require strict obesity control. Diethylpropion hydrochloride has been reported useful in obese patients with hypertension, symptomatic cardiovascular disease, or diabetes. While it is not suggested that Tenuate in any way reduces these complications in the overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. (Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.)

### In uncomplicated obesity.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

### Clinical effectiveness.

The anorexic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.[1] And the unique chemistry of Tenuate provides "...anorexic potency with minimal overt central nervous system or cardiovascular stimulation."[2] Compared with the amphetamines, diethylpropion has minimal potential for abuse.

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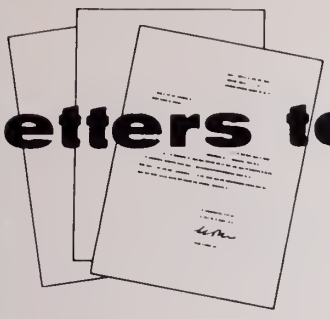

# Letters to the Editors

## FLORIDA PREMARITAL LAW

**To the Editor:** The Florida Premarital Law, Chapter 741.051, Florida Statutes, was importantly amended by the 1978 Legislature. Florida physicians would want to know the changes.

The original law, placed on the books during the early 1940's, provided that all persons applying for a marriage license must have a serologic test for syphilis and a physical examination. The amendment passed by the last Legislature deleted the requirement for a physical and, in essence, made the matter optional dependent upon the medical decision of the physician.

The change grew out of a growing concern on the part of physicians generally that a physical examination often was not required for ruling-out syphilis and to perform one simply for satisfying a statement on the laboratory certificate seemed inappropriate and constituted an unnecessary cost. Many refused to submit their patients to a physical for this special purpose and by so doing were perjuring themselves in signing the certificate.

The full context of the new law follows:

"741.051 Marriage licenses; conditions precedent to issuance; certificate of physician. — Every person making application for license to marry shall file with the county court judge or clerk of the circuit court, as a condition precedent to the issuance of any such license, a certificate from a duly licensed physician, which certificate shall state that the applicant has been given an approved serological test for syphilis; and found not to be infected with syphilis, or if so infected, not to be in a stage of infection which is or may become communicable to the marital partner. Said serological test shall be made not more than 60 days prior to the date of application for a license to marry."

*E. Charlton Prather, M.D.*
*Staff Director, Health Program Office and State Health Officer*
*Tallahassee*

## REPORT OF THE BOARD OF MEDICAL EXAMINERS

**To the Editor:** Enclosed is copy of activities and actions of the Board of Medical Examiners during our July 1978 meetings. We hope that this will be the first in a series of regular reports on Board meetings to the physicians of Florida so that they can know in more detail of the activities of the Board. We hope that the Journal editor and Journal personnel will allot regular space for these reports when received.

The Board feels that many physicians do not understand how the Board functions and the many restrictions placed upon the Board by the Administrative Procedures Act of Florida as well as by the absolute necessity of affording due process to all physicians who may become the subject of investigation by the Board or who may have charges made against them by the Board.

The Board Members appreciate constructive criticism. They also feel that if more physicians know about the Board, the staff and personnel of the Board and the personnel and budgetary restrictions that we operate under, they could see why we are hampered in our efforts to more efficiently and expeditiously respond to complaints and carry administrative hearings to their conclusions. The Board is most anxious to have pleasant cooperative relations with organized medicine and it is imperative that organized medicine and the Board Members work together in the interest of the public. The personnel of our Board and the Members of our Board are most sincere and anxious to do the best job possible with the facilities and resources which we have, but we do want and need the cooperation and understanding of each physician in Florida as well as the same from county medical societies, appropriate committees, specialty societies and the FMA.

Thank you in advance for enabling us to carry this message and this report to FMA members and Florida physicians in the pages of the JFMA.

*George S. Palmer, M.D.*
*Executive Director*
*Florida Board of Medical Examiners*
*Tallahassee*

**(Editor's Note:** The report of the Board of Medical Examiners appears elsewhere in this issue of *The Journal.)*

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## *THE THIRD ANNUAL CARDIOVASCULAR SYMPOSIUM*
## FEBRUARY 2 AND 3, 1979

**THE CARIBBEAN GULF HOTEL** **CLEARWATER BEACH, FLORIDA**

This third annual symposium is devoted primarily to valvular heart disease in the adult. The natural history, clinical recognition, non-invasive and invasive evaluation, as well as the surgical and non-surgical management, will be presented in detail.

A special presentation will also deal with a current update in the evaluation and management of coronary artery disease.

An outstanding faculty has been assembled for the symposium which should be of interest to all physicians caring for patients with cardiovascular disease.

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| Melody Taber, R.N. | Los Angeles, California |
| Abdul J. Tajik, M.D. | Rochester, Minnesota |
| Robert G. Tancredi, M.D. | Rochester, Minnesota |

As an organization accredited for continuing medical education, the Medical Education Committee of the Florida Medical Foundation certifies that this continuing medical education activity meets the criteria for 9 credit hours in Category 1 of the Physician's Recognition Award of the American Medical Association. This program meets the Florida Medical Association continuing medical education requirement for 9 hours of FMA Mandatory credit, and is acceptable for 9 Prescribed hours by the American Academy of Family Physicians. 9 Contact hours provided by Morton F. Plant Hospital have been approved for R.N.'s and L.P.N.'s attending all sessions of this symposium.

RESERVATION FEES: $55. — all physicians
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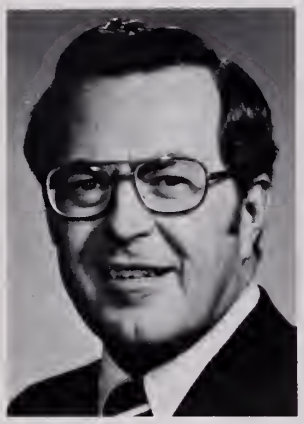
Morton F. Plant Heart Center — Symposium
Donald R. Eubanks, M.D. (813/441-5166)
Program Director
323 Jeffords Street
Clearwater, Florida 33517

# Medical News Around the State



Dr. Windom

**FMA Secretary Robert E. Windom, M.D., of Sarasota** . . . has been elected to the Board of Directors of the American Heart Association. The election came at the AHA's Annual Assembly in Dallas, Texas, last November 17.

"Dr. Windom's continuing interest and knowledge of national legislative matters makes him a valuable addition to the Board," outgoing AHA President Gerald G. Austin, M.D., observed.

Dr. Windom is a former President of the American Heart Association, Florida Affiliate. He is former Chairman of the FMA Council on Voluntary Health Agencies and the Committee on Press, Radio and Television. He has been FMA Secretary for the past two and a half years.

**The F. Eugene Tubbs, M.D. Burn Intensive Care Unit** . . . has been dedicated at the University of Florida's Shands Teaching Hospital. Among those attending the dedication on September 30 were the late physician's mother and children.

Dr. Tubbs, a former member of the State Legislature, and his wife were killed in a plane crash on July 4 (See JFMA, Aug. 1978, p. 662).

**Charlotte MaGuire Behrman, M.D. of Tallahassee** . . . has received a Certificate of Appreciation from the Federal Executive Institute of Charlottesville, Va., and the Institute's Alumni Association.

Dr. Behrman was recognized for her "generous cooperation, assistance, and contributions to the development of the Institute during the first decade of operations." The Institute was created to provide both practical and philosophical, multi-faceted development to leaders of federal government career positions.

Dr. Behrman, now Medical Services Coordinator of the Florida Department of Health and Rehabilitative Services, graduated from the Institute in 1971 and served as Executive Officer of the Alumni Association in 1974.

**Twelve Floridians** . . . are among 160 physicians and surgeons from throughout the country to be designated Fellows of the American College of Chest Physicians.

Formal induction of the new Fellows took place at the ACCP's 44th Annual Scientific Assembly in Washington, D.C., on November 1. Fellows from Florida include:

Aspi Doctor, M.D., Fort Pierce; Jonathan Ravid Jaffe, M.D., Hollywood; Miguel Milian, M.D., Miami; Ponnuswamy Natarajan, M.D., Sarasota; Guia P. Nortell, M.D., Punta Gorda; Robert D. Pascotto, M.D., Fort Myers; Abdur Rashid, M.D., Fort Pierce; M. Dean Razi, M.D., St. Petersburg; Brian G. Salisbury, M.D., Clearwater; Peter H. Segall, M.D., Miami Beach; and Esfandir Shafii, M.D., and Raghavendra R. Vijayanagar, M.D., both of Tampa.

Dr. Rhoton

**Albert L. Rhoton, Jr., M.D.,** . . . of Gainesville, has been elected to a three-year term on the Board of Governors of the American College of Surgeons. The election came at the Annual Meeting of ACS Fellows in San Francisco.

Dr. Rhoton is Professor and Chief of Neurological Surgery at the University of Florida College of Medicine. A native of Kentucky, Dr. Rhoton received his M.D. degree from Washington University School of Medicine in St. Louis in 1959 and is a member of the Florida Medical Association and many other professional organizations.

The new ACS Governor was Guest Editor of *The Journal*'s Special Issue on Neurological Surgery, which was published in November of 1977.

**The University of Florida College of Medicine** . . . has received a gift of $1 million to endow a full professorship in its Division of Neurosurgery.

The gift, from the family of the late R. D. Keene of the Orlando area, will provide salary support for a neurosurgeon to be appointed later as "The R. D. Keene Family Professor of Neurosurgery." The professor will conduct clinical practice and research in microneurosurgery.

The Keene family has been associated with Florida's citrus industry for many years.

According to University President Robert Q. Marston, M.D., the gift will "enrich the established worldwide reputation of the Division of Neurosurgery under the leadership of Dr. Albert Rhoton."

Dr. Rhoton is Professor and Chief of the Division.

**Blanche I. Urey, Ed.D.** . . . Dean of the University of Florida College of Nursing since 1973 . . . died on December 4 after suffering a stroke in her home in Gainesville.

A native of New York State, Dr. Urey held bachelor's and master's degrees in nursing education and received her doctor of education degree in 1968 at the Teachers College of Columbia University. She spent 23 years in nursing practice, education, research and administration.

**The Duval County Medical Society** . . . celebrated its 125th anniversary with a dinner and dance at Jacksonville's Timuquana Country Club on December 2. Robert K. Middlekauff, M.D., of Jacksonville, is President of DCMS.

**The Florida Medical Association** . . . and the Florida Academy of Family Physicians will sponsor The Third Physician Recruitment Conference in Tampa on January 20 at the Host International Hotel.

Officials from communities throughout the State have been invited to participate along with medical residents, Chamber of Commerce representatives, hospital administrators, state legislators and practicing physicians.

The Conference will offer information about physician recruitment to community leaders who are trying to get more doctors for their areas. FMA sponsored similar conferences in 1976 and 1977.

Dr. Rubin

**Melvin L. Rubin, M.D. of Gainesville** . . . has been named Chairman of the Department of Ophthalmology at the University of Florida College of Medicine. He succeeds Herbert E. Kaufman, M.D., who resigned and left the State several months ago.

Dr. Rubin joined the University of Florida in 1963, moving up to full Professor in 1967. He has extensive background in diagnosis and treatment of the retina.

The new Chairman is active nationally in his specialty. He is President-Elect of the Association for Research in Vision and Ophthalmology; a member of the American Board of Ophthalmology; and a member of the Executive Committee of the American Academy of Ophthalmology.

A graduate of the University of California School of Medicine in 1957, Dr. Rubin is the author of 80 scientific papers and four textbooks on visual science, optics and refraction.

# Book Reviews

**Book Review Editor**

**F. Norman Vickers, M.D.**

**Medical Pharmacology**. Sixth edition, edited by F. H. Meyers, E. Jawetz, and A. Goldfien. 762 pages. Price $14.50. Lange Medical Publications, Los Altos, California, 1978.

This publishing firm has a strong tradition founded on publishing reasonably priced texts that are excellent for the medical student who wants a reference about a specific area but has a limited budget. This book lives up to that reputation. It is ideal for most medical school pharmacology classes that teach basic principles of pharmacology, categories of drugs, mechanisms of action, major adverse reactions, limitations and indications of available pharmacotherapeutic agents.

For the practitioner who needs information for prescribing purposes, this book would be deficient. It is limited in scope since it is designed to teach principles of pharmacology rather than being encyclopedic like the *Physicians Desk Reference*. To this end, the book would not be that much help to the average practitioner.

Since the book is relatively compact yet comprehensive in contents, it is ideal for those who need a review of pharmacology. It is also an excellent text for the ambitious student of medicine who wants to keep abreast with all that is going on in the field of pharmacology.

The book contains numerous useful, comprehensive tables. It also contains the chemical structures of most drugs discussed in the text. The text is divided into eight major divisions including general information, autonomic and cardiovascular drugs, central nervous system drugs, systemic drugs, endocrine, metabolic and nutritional drugs, chemotherapeutics and toxicology.

The text is extremely readable and succinct. It is divided into subsections that allow easy access to specific information about the various drugs.

In summary, this is an excellent, readable text for those who want to have a basic understanding about a wide range of drugs.

Jerrold A. Van Dyke
Gainesville

Mr. Van Dyke is an Assistant Editor of the Journal.

**Dos, Don'ts & Maybes of English Usage** by Theodore M. Bernstein. 250 pages. Price $12.50. The New York Times Books, New York, 1977.

Mr. Bernstein writes a column on words for The New York Times. He is also the author of several other books on writing. This present volume has troublesome words arranged in alphabetical order with brief comment about proper usage. The style is succinct and aimed at the general reader. His attempts at humor are sometimes strained, but usually helpful as a memory tool. While not my favorite reference work, it can be recommended as a book for those interested in words or writing. This might be an acceptable gift for a family member. It will go on my shelf as a reference alongside the *Harper Dictionary of Contemporary Usage*. An example of Mr. Bernstein's style is given for sake of illustration:

> *NAUSEOUS, NAUSEATED*
> ***Nauseous** and **nauseated** are used by many people as if they were interchangeable, but they are not. They are, of course, related; both are based on the Greek **naus** (ship). A ship produces sea-sickness and **nausea** is not far removed from that. A thing is **nauseous** if it makes one sick to the stomach; the victim of that sickness is not **nauseous,** he is **nauseated.** A person who feels sick is not **nauseous** any more than a person who has been poisoned is poisonous.*

F.N.V.

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**When a person finds no peace within himself, it is useless to seek it elsewhere.**

# Books Received

**Receipt of the following books is acknowledged. Medical readers interested in reviewing particular books are invited to address requests to the Book Review Editor. Following acceptance of a written review for publication, a reviewer may then retain the book reviewed for his personal or favorite library.**

**Pharmacological and Toxicological Perspectives of Commonly Abused Drugs** by Darryl Inaba, Ph.D., E. Leong Way, Ph.D., Kenneth Blum, Ph.D. and Sidney H. Schnoll, M.D. 44 Pages. National Drug Abuse Center, Rosslyn, Virginia, 1978.

**Currents in Alcoholism, Biological, Biochemical, and Clinical Studies,** Edited by Frank A. Seixas, M.D. 601 Pages. Illustrated. Price $31.50. Grune & Stratton, Inc., New York, 1978.

**Controlling the Use of Therapeutic Drugs: An International Comparison** edited by William M. Wardell. 263 Pages. American Enterprise Institute for Public Policy Research, 1978.

**Directory of Pathology, Training Programs 1979-80** by the Intersociety Committee on Pathology Information, Inc. 470 Pages. Illustrated. Price $25.00. Geo. W. King, Co., Baltimore, 1978.

**Wholistic Dimensions in Healing, A Resource Guide** by Leslie J. Kaslof. 295 Pages. Illustrated. Price $7.95. Doubleday & Company, Inc., Garden City, New York, 1978.

**Culture and Comment, The New Relationships Between the Generations in the 1970's** by Margaret Mead. 177 Pages. Price $2.95. Anchor Press/Doubleday, Garden City, New York, 1978.

**Uses of Enzymes and Immobilized Enzymes** by Francis X. Hasselberger. 220 Pages. Price $14.95. Nelson-Hall Publishers, Chicago, 1978.

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A comprehensive program "Current Trends in Aging" (Geriatric Medicine, 1979) to be held February 1, 2, 1979, at beautiful Cypress Gardens Quality Inn, Winter Haven, Florida.

International Faculty of experts which include: medical, surgical, rehabilitative, social, psychiatric, pharmacological, psychological & nursing.

Application for 10 credit hours CME for AMA-I and FMA has been made, as well as nursing CEU and nursing home administrators CEU credits.

Contact Barbara L. Roby at:

Geri-Center, Inc.
1624 6th Street, NW
Winter Haven, FL 33880
Phone: (813) 293-3471

# Others Are Saying

## Report From Andy Ireland 8th District Congressman — Florida

The cost and quality of health care in America today is one of the major issues facing us all.

For most Americans, the real problem lies with the soaring costs, not the quality of care. Unfortunately, this problem of cost is exceeded only by the current proposal being offered to solve it; national health insurance.

President Carter and Senator Kennedy are locked in a struggle now over just what form such a program should take and how much it will cost.

The usual justification for adopting a national health insurance program is that free enterprise management of health care has failed.

Actually, our current problems may be due to that fact that we already have too much government interference in our health system and not enough free enterprise.

Canada presents an interesting case study on the question of government verses free enterprise involvement in health care.

In 1958 Canada introduced a national program to cover hospital costs, and added doctors bills in 1968.

Since the plan was instituted, health care spending has grown faster in Canada than in the U.S. Between 1960 and 1975 hospital costs increased 424 percent in Canada and 383 percent in the U.S. During the same period doctors bills went up 71 percent in Canada and 65 percent in the U.S.

The Canadian plan has also failed to halt the over utilization of hospital care — a major factor in health costs in the U.S. The average Canadian spends 1.8 days per year in the hospital compared to the 1.2 days for the average American.

Although health care is supposedly free in Canada, there is a growing patchwork of extra costs, and one out of two Canadians now buys private health insurance to supplement the government program.

A recent University of California study of the Canadian plan points out that while low income groups do get somewhat more health care than previously, they pay for it in other ways. Fully sixty cents of every dollar spent on national health care is offset by reductions in funds to aid the blind and disabled, workmans compensation and other social programs.

In effect, the study concludes that most Canadians pay more for their health care now that it is free.

That conclusion brings to mind the old adage, to err is human, but to really mess up, you need a government program.

The classic liberal formula that only federal programs (financed of course by higher taxes and deficit spending) can solve our problems has been disapproved in practice and denounced by the voters.

If we allow this discredited concept to be applied to our health industry, it may truly be a case of where the cure is worse than the disease.

Before we even think about adopting any form of national health insurance, we should clearly understand the cost, where the funds come from, and what we are likely to get for our money. In trying to answer these questions, there is much to be learned from Canada.

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**Good enough is not enough**
**It is ever the enemy of the best**

**Henry Atkinson**

# The Challenge

Not long ago I overheard a physician tell a semi-hostile employee unctiously (and that's a dandy word) that, were it not for "us doctors" there wouldn't be any hospital jobs — since "we" bring in the patients who pay the hospital's salaries. I guess that's true in general, but I went down a couple of tangents from that statement which merit review from time to time — nothing new, just review.

Although no one of us is indispensable in the hospital framework, virtually every one of us represents an area without which the hospital could not run efficiently, if at all. So, as a matter of fact, we're all important — if not "all-important."

The above physician's inference that he and his kind were of primal importance is just flat out wrong. I don't know for sure whether he's second or sixteenth, but he's not first.

I'm sure you've guessed the "winner and (not so) new champion" — the patient! Now, there's a cat without which we really do close the shop! We all tend to take them for granted, for doesn't there seem to be an endless supply of them? Well, not quite, as a review of our census may show. We have competitors and many of them treat their patients perhaps more assiduously than we do. Some recent first-hand reports more than just suggest this.

I challenge all — myself expressly included — to this periodic rededication to serve our patients more attentively, more thoroughly and more courteously than before, just as if our jobs depended on it — because in fact they do — don't they?

James D. Beeson, M.D.

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Reprinted as a Guest Editorial from *News & Views*, a monthly publication of the Memorial Hospital of Jacksonville. October-November, 1978.

Dr. Beeson is President of the Memorial Hospital of Jacksonville medical staff.

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# To All Members of the Malaysian Medical Association

Dear Member:

**Insertion in the Yellow Pages of the Telephone Directory**

We wish to remind you that when you are approached to have your name/clinic address listed in the Yellow Pages of the Telephone Directory, please do **not** pay for the insertion because insertions in the Yellow Pages are exclusively for the benefits and interests of the public.

The Ethical Committee of the MMA is of the opinion that if a medical practitioner has to pay for the insertion in the Yellow Pages, then this may be construed as advertising and thus contravenes Section VII (i) and (ii) of the Ethical Code.

Thank you.

Yours sincerely,

Dr. Lim Say Wan
Hon. General Secretary
Malaysian Medical Association

# Rebuttal on British Health System

To the Editor:

Re Judith Randal's Op-Ed Page article entitled "Britain's National Health Plan Is a Smash — While Medical Expenses Stagger Americans":

I'm afraid Ms. Randal has been stricken by a severe case of tunnel vision with complications of misinformation and pie-in-the-sky. As a former resident of Great Britain, I respectfully call attention to the following facts:

The British National Health Service (NHS) is operating on the brink of bankruptcy (Sweden's NHS *is* bankrupt — as the country nearly is). Last year the prime minister flatly refused an increase in the NHS budget which the administration claimed was absolutely essential to the survival of NHS in the face of astronomical costs.

The totally tax-subsidized program costs Britain over $10.2 billion a year. This is 10 percent of total public spending. Only 6.5 percent of this huge budget goes to general medical services and the building, running, and staffing of public medical clinics. Many Britons have found this is not enough to buy quality medical care. medical care.

Patients are likely to see a different doctor on every visit, and the visits are necessarily short, since each general practitioner has an average of 2,365 patients in his practice.

The private health-insurance industry is booming in Britain so people can get private care, rather than go through the NHS "system."

Currently, the waiting time in NHS for routine tonsillectomies is six to seven years. Hernia repairs can expect to wait eight years. Patients in their late 60s are simply not placed on the waiting list since they will probably be dead by the time their turn arrives anyway. (My own 74-year-old father, in order to have a much-needed prostate operation, had to have surgery done privately — and paid for it in full.)

Ms. Randal points an accusing finger at the fact that Britain's maternal and infant-death rates are lower than in America. The reason for this statistic lies with pregnant mothers of our lower socio-economic groups who do not seek the proper prenatal care until complications occur or delivery is eminent. Yet our own state welfare agencies are offering this care today. Despite this, it is a fact that in the past five years our maternal/infant mortality rate has dropped more than any other country in the free world.

NHS offers "free" eyeglasses in either old-fashioned plastic or wire frames. To avoid the social stigma of wearing NHS glasses, most people wind up paying *extra* for more fashionable frames.

Ms. Randal states that the average American spends fewer days in the hospital than the average Briton. Good grief, what's wrong with that? There is a shortage of modern hospitals in Britain. A survey done in the 1960s revealed that the averge NHS hospital bed was over 50 years old. I was invited to visit a newly built hospital in Wiltshire, England. Bureaucratic bumbling resulted in the operating rooms being in a separate building requiring patients to be wheeled *outside* in the wind and rain going to and from the hospital.

Ms. Randal repeatedly refers to "free" care and care at "no cost" to treat patients and to run hospitals. This money is being provided by every working man, woman, and child through what has become one of the most repressive taxation systems in the world.

The finest medical and dental care in the world is available in the USA today — and it is affordable. Unfortunately, no one worries about medical costs until they get sick. I suggest a system under which medical insurance be made mandatory (aren't you required by law, to have automobile insurance?) and administered by our countrys' private-insurance industry. Not only would this provide a great impetus to our free-enterprise system, but would avoid involving inefficient Washington bureaucracy.

Margaret H. Hansen
Pompano Beach

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Reprinted from the Fort Lauderdale News, August 24, 1978.

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**Tact is the art of making a point without making an enemy.**

UNIVERSITY OF MAIMI SCHOOL OF MEDICINE—DEPARTMENT OF INTERNAL MEDICINE

# FOURTEENTH ANNUAL POSTGRADUATE COURSE

## *"INTERNAL MEDICINE 1979"*

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**These sessions will consist of simultaneous group meetings in which illustrated aspects of each subspecialty are presented followed by open discussion. These sessions will be devoted to the presentation of topics in *Critical Care in Internal Medicine.* Special emphasis will be given to the most recent advances in the management of the critically ill patient.**

### STATE OF THE ART LECTURES

Each subspecialty will be introduced by a State of the Art Lecture given by a distinguished authority.

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Audio visual teaching aids (television sets with tape players, slide projectors synchronized with cassette tapes and guides) will be available during the meeting for self instruction and reinforcement.

### SPOUSES ACTIVITIES

An extensive program will be offered daily.

### LEARNING CENTER

The Learning Center consists of video tapes and fully automatic synchronized cassette/slide projection of lectures. This center will be available during the evenings.

### HOTEL ATTRACTIONS

The hotel, presently under complete renovation, has several golf courses with complimentary green fees provided, two swimming pools, private beach ice skating rink, complete gymnasia, bowling lanes, tennis courts, shuffle-board and a billiard room.

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Scientific and Technical Exhibits will be shown daily.

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As an organization accredited for continuing medical education, the University of Miami School of Medicine certifies that this continuing medical education offering meets the criteria for 35 credit hours in Category I of the Physician's Recognition Award of the American Medical Association, provided it is used and completed as designed. Approval by the American Academy of Family Physicians for prescribed hours will be applied for.

**SELF-INSTRUCTIONAL MATERIALS: 25 Hours Credit**

As an organization accredited for continuing medical education, the University of Miami School of Medicine certifies that when these continuing medical education materials are used as directed, they meet the criteria for 25 hours of credit in Category I for the Physician's Recognition Award of the American Medical Association.

**REGISTRATION:** $350—Physicians $200—*Physicians in training. **For Registration and Information write to:** J. BOCLES, M.D., Department of Medicine, University of Miami School of Medicine, P.O. Box 016760, Miami, Florida 33101, Phone: (305) 547-6063.

*Letter from Chief of Service must accompany registration.

# FMA AUXILIARY

## INTERPLAST Needs Your Help

In the midst of all uproar about organized medicine's alleged and supposedly self-serving "lofty economic niche," a group of doctors in California is quietly changing the lives of hundreds of horribly deformed children in Latin America. Called INTERPLAST, and consisting of volunteer physicians, plastic surgeons, nurses, anesthesiologists, speech therapists and other medical personnel donating their time, skill and services, the group was organized to provide reconstructive surgery to children victims of birth defects, accidents and burns — for free!

Founded in 1965 by Dr. Donald Laub of Stanford University, and totally nonprofit — its major funding derived only from private donations and charity drives by volunteers — this group sends surgical teams to Honduras, Mexico, Guatemala, Nicaragua, and other impoverished areas of Latin America at the invitation of their governments and local medical organizations. At community hospitals and makeshift clinics, they perform corrective surgery on disfigured children who stream in from the hills and villages of Latin America where a deformed child is taunted a freak and deformity is cursed as the lot of the damned.

By 1975, INTERPLAST made 42 surgical trips abroad including Africa and Western Samoa and treated 1,240 patients. Cases requiring multiple and complex surgery are brought back to the United States.

Although all surgery and most supplies, drugs, equipment and transportation are donated, and costs have been cut to a mere 10% of U.S. costs, each operation still ranges from $65 to $110.

The Florida Medical Association Auxiliary, introduced to the program last year, adopted INTERPLAST as one of its pet projects. Working closely with INTERPLAST EAST, a branch based in Fort Lauderdale, the Auxiliary's International Health Committee raised over $8,000 last year by handcrafting decorative articles and selling them at bazaars, coffees and meetings. INTERPLAST benefited from this fund. This year, they are working even harder, according to FMAA President Mrs. Thomas B. Thames.

The program is expanding to other underdeveloped nations, and the drive for more funds, more volunteers and more medical personnel is on! More children are quietly waiting!

Mrs. Rod M. Martija
Public Relations Chairman
FMA Auxiliary
Key Biscayne

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**Whenever you are to do a thing, though it can never be known but to yourself, ask yourself how you would act were all the world looking at you, and act accordingly.**

**Thomas Jefferson**

# Florida Medical Association Auxiliary, Inc.

## THIRTEENTH ANNUAL BENEFIT ART SHOW

### Exhibit Rules and Regulations

### Read Rules Carefully

1. All entries must be original work.
2. Pictures must be framed and wired for hanging. (Stands will be provided for sculpture, etc.)
3. Each entry must have a typed card indicating Name, Address, Medium, Dimensions and Title. Please list price if entry is for sale; otherwise, mark not for sale (NFS).
4. Only one artist's name should be listed for each registration slip.
5. A registration fee of $10 will be charged for each entry. Entry fees are tax deductible.
6. All registration slips and checks must be sent in together no later than May 9, 1979.
7. All pre-registered entries are to be delivered by hand to the Exhibit Hall at the Diplomat Hotel no later than 3:00 p.m. Wednesday, May 23. Shipped entries will be refused.
8. All entries must remain on exhibition until 3:00 p.m., Saturday, May 26. They MUST be picked up between 3:00 and 4:00 p.m., Saturday.
9. We will not be responsible for entries not picked up by 4:00 p.m., Saturday, May 26, 1979.
10. Doctors, their wives and children are eligible to enter. Entry fees will be donations to AMA-ERF, divided equally among Florida medical schools.

Kindly enter my registration to show in the Benefit Art Show.

Fee of $_____ for _____ entries is enclosed. I agree to abide by the rules and regulations for exhibiting material in the show.

Name _____

Address _____

City _____ County _____

I will be showing in the following categories: Please check (X) appropriate category (categories) applying to your entry (entries).

( ) A. Painting. Include any media in color: acrylic, oil, casein, collage, watercolor, pastel, etc.

Size: _____ (H) x _____ (W) To be hung on wall.

( ) B. Graphics. Include a pen and ink, charcoal, photography, etc.

Size: _____ (H) x _____ (W)

( ) C. Crafts. Include sculpture, pottery, ceramics, mosaic, weaving, jewelry, etc.

Size: _____ (L) x _____ (D) x _____ (H)

( ) I am the son/daughter of a Florida physician. Age _____

Judges will give "Awards of Merit" and "Best in Show." An "Editor's Award," given by the Journal of the Florida Medical Association, will be used on the cover of a future issue of the FMA Journal.

A registration fee of $10 will be charged for each entry. Make checks payable to:

FMA-A Art Show
c/o Mrs. James D. Moody
4585 Lake Holden Hills Drive
Orlando, Florida 32809

NOTE: It is most important to know the size of your art objects, paintings, etc., to enable us to display them more professionally. We will not be responsible for damage or loss of any entry.

**REGISTRATION DEADLINE MAY 9, 1979**

Judging will take place beginning at 9:00 a.m. on Thursday, May 24, 1979.

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# MEETINGS

## Approved by the FMA Committee on Continuing Medical Education

### FEBRUARY

**24th Central Florida Medical Meeting,** Feb. 1-4, Contemporary Resort Hotel, Lake Buena Vista, Florida. For information: Sam F. Elder, M.D., 601 Rollins Avenue, Orlando 32803.

**Morton F. Plant Heart Center, 3rd Annual Cardiovascular Symposium-Valvular Heart Disease in Adults,** Feb. 2-3, Caribbean Gulf Hotel, Clearwater Beach. For information: Donald R. Eubanks, M.D., 323 Jeffords St., Clearwater 33517.

**Second Symposium on Neurological Surgery of the Ear,** Feb. 3-8, Sarasota. For information: Ms. Susan G. Brown, 1845 Hillview Street, Sarasota 33579.

**Fifth Annual Vail Conference in Anesthesiology,** Feb. 3-10, The Mark Resort, Vail, Colorado.*

**Management of Respiratory and Cardiac Failure,** Feb. 5-9, South Seas Plantation, Captiva Island. For information: Dale E. Braddy, 911 Busse Highway, Park Ridge, Illinois 60068.

**Obstetrical and Gynecological Ultrasound In-Service Workshop,** Feb. 5-9, Jackson Memorial Hospital, Miami.*

**Florida Midwinter Seminar in Ophthalmology and Otolaryngology,** Feb. 5-10, Americana Hotel, Miami Beach.*

**Gastroenterology Today: For the Clinician,** Feb. 9-11, Dutch Inn, Lake Buena Vista.**

**ECG Interpretation & Arrhythmia Management,** Feb. 9-11, Sheraton Hotel, Fort Lauderdale. For information: William E. James, Ph.D., 64 Inverness Dr., E., Englewood, Colorado 80112.

**Fourteenth Annual Postgraduate Course "Internal Medicine 1979",** Feb. 11-16, Fontainebleau Hilton Hotel, Miami Beach.*

**Imageology 1979,** Feb. 16-23, Konover Hotel, Miami Beach. For information: Mrs. Lucy E. Kelley, c/o Medical Seminars, P.O. Box 343762, Coral Gables 33134.

**Pediatric Dermatology Seminar,** Feb. 17-26, M/S Buccaneer, Galapagos Islands, South America. For information: Guinter Kahn, M.D., 16800 Northwest 2nd Ave., Suite 401, North Miami Beach 33169.

**Tutorial Courses of Instruction in Coronary Care for the Practicing Physician,** Feb. 19-24, Jackson Memorial Hospital, Miami.*

**Management of the Tiny Baby — 1979,** Feb. 22-23, Dutch Inn, Lake Buena Vista. For information: Keith S. Kanarek, M.D., 1416 South Orange Avenue, Orlando, Florida 32806.

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***For information: Contact Division of Continuing Medical Education, D23-3, University of Miami School of Medicine, P.O. Box 016960, Miami 33101. Tel. (305) 547-6716.**

****For information: Contact Division of Continuing Education, Box J-233, J. Hillis Miller Health Center, Gainesville 32610. Tel. (904) 392-3143, or 392-3183.**

**+For information: Contact Janifer M. Judisch, M.D., CME, University of South Florida, Tampa 33620. Tel. (813) 974-2074.**

**OB-GYN Cruise Seminar,** Feb. 24-Mar. 6. (Cruise line to be announced).*

**Cruise Aboard the "DORIC",** Feb. 24-Mar. 7, Miami.*

**12th Pan American Congress of Ophthalmology,** Feb. 25-Mar. 2, Fontainebleau Hotel, Miami Beach.*

**Laparoscopy Course,** Feb. 26-27, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th Street, Jacksonville 32209.

**Basic Neurology for Psychiatrists, Family Practitioners and General Practitioners,** Feb. 26-Mar. 2, Konover Hotel, Miami Beach.*

**Teaching Conference in Clinical Cardiology,** Feb. 28-Mar. 3, Americana Hotel, Miami Beach.*

**Eleventh Teaching Conference in Clinical Cardiology,** Feb. 28 - Mar. 3, Americana Hotel, Bal Harbour.*

**Diagnostic Radiology for the Emergency and Primary Care Physician,** Feb. 28-Mar. 4, Bahia Mar Hotel, Fort Lauderdale. For information: E.M.S.S., 3900 N.W. 79th Ave., Suite 469, Miami 33166.

### MARCH

**Gynecologic Endocrinology and Infertility,** Mar. 1-3, Orlando Hyatt House, Orlando. For information: Bernard Cantor, M.D., Dept. Ob. Gyn., Box J-294, JHMHC, Univ. of Fla., Gainesville 32610.

**6th Annual Topics in Urology,** Mar. 1-3, Gainesville Hilton, Gainesville.**

**Skin 1979: Modern Management of Common Skin Diseases,** Mar. 2-4, Carillon Hotel, Miami Beach.*

**Symposium on Management of Uveal Melanomas,** Mar. 3, University of South Florida College of Medicine, Tampa.+

**Postgraduate Medical Refresher Course,** Mar. 5-15, Galt Ocean Mile Hotel, Fort Lauderdale. For information: Donald R. Lannin, M.D., 832 Central Medical Building, St. Paul, Minnesota 55104.

**Medical Imaging 1979,** Mar. 8-10, Royal Biscayne Hotel, Miami.*

**Cardiac Symptoms and Arrhythmias,** Mar. 9-11, Americana Hotel, Bal Harbour. For information: William E. James, Ph.D., 64 Inverness Dr., E., Englewood, Colorado 80112.

**Psychiatry, Present and Future,** Mar. 10, Sheridan Hotel, Miami. For information: David G. Pinosky, M.D., 1660 Northwest 7th Court, Miami 33136.

**Medical Hypnosis and Short-Term Psychotherapy,** Mar. 10-14, Americana Hotel, Miami Beach.*

**Current Trends in Radioimmunoassay 1979,** Mar. 11-13, Royal Biscayne Hotel, Miami.*

**Problems in Rheumatology,** Mar. 15-18, Don CeSar Beach Resort Hotel, St. Petersburg Beach.+

**10th Annual Topics in Internal Medicine,** Mar. 22-24, Hyatt House, Kissimmee.**

**International Conference on Tuberculosis,** Mar. 22-24, Royal Plaza Hotel, Orlando. For information: Dale E. Braddy, 911 Busse Highway, Park Ridge, Illinois 60068.

**American and European Views on Anesthesiology,** Mar. 24-31, Zermatt, Switzerland.*

**Laparoscopy Course,** Mar. 26-27, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th Street, Jacksonville 32209.

**Medical Imaging Seminar II,** Mar. 28-31, Konover Hotel, Miami Beach. For information: June K. Allen, 4300 Alton Road, Miami Beach 33140.

APRIL

**Cirrhosis & Portal Hypertension: Recent Advances in Diagnosis and Therapy,** Apr. 5, Tampa.+

**Tutorial Courses of Instruction in Coronary Care for the Practicing Physician,** Apr. 9-14, Jackson Memorial Hospital, Miami.*

**Laparoscopy Course,** Apr. 23-24, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th Street, Jacksonville 32209.

**Myocardial Infarction and Other Ischemic Heart Syndromes,** Apr. 25-28, Innisbrook Resort, Tarpon Springs.**

**The Impact of Basic Research Today on Clinical Medicine Tomorrow,** Apr. 26-29, Sarasota. For information: Charles R. Estill, 1865 Hawthorne Street, Sarasota 33579.

**Sarasota Medical Awards Conference,** Apr. 26-29, Hyatt House, Sarasota. For information: S. P. Bralow, M.D., 1515 South Osprey Ave., Sarasota 33579.

**Seventh Annual Surgical Intensive Care Symposium,** Apr. 27-30 (location to be announced).*

**Tutorial Courses of Instruction in Coronary Care for the Practicing Physician,** Apr. 30-May 5, Jackson Memorial Hospital, Miami.*

MAY

**7th Annual Intensive Care Symposium,** May 4-7, Eden Roc Hotel, Miami Beach.*

**Ultrasound (General) In-Service Workshop,** May 7-11, Jackson Memorial Hospital, Miami.**

**Detection and Colposcopy & Update in Gynecologic Oncology,** May 13-19, Royal Biscayne Beach Hotel and Racquet Club, Key Biscayne.*

**9th Family Practice Review,** May 16-19, Gainesville Hilton, Gainesville.**

**Laparoscopy Course,** May 28-29, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th Street, Jacksonville 32209.

JUNE

**Master Approach to Cardiovascular Problems — 7th Annual Conference,** June 8-10, The Contemporary Hotel, Lake Buena Vista.*

**Florida Suncoast Pediatric Conference,** June 10-13, Sheraton Sand Key Hotel, Clearwater. For information: Donald Macdonald, M.D., 1510 Barry St., Suite C, Clearwater 33516.

**Laparoscopy Course,** June 25-26, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th Street, Jacksonville 32209.

JULY

**Laparoscopy Course,** July 30-31, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th Street, Jacksonville 32209.

AUGUST

**ECG Interpretation & Arrhythmia Management,** Aug. 17-19, Orlando Hyatt, Orlando. For information: William E. James, Ph.D., 64 Inverness Dr., E., Englewood, Colorado 80112.

**Laparoscopy Course,** Aug. 27-28, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th St., Jacksonville 32209.

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**I regard myself as an optimist. An optimist is a person who knows exactly how sad a place the world can be. The pessimist is one who is forever finding out.**

**Peter Ustinov**

# CLASSIFIED ADS

**Physicians Wanted**

**FAMILY PRACTITIONERS**

GENERAL PRACTITIONER: For well equipped medical clinic immediately adjacent to 120 bed skilled nursing facility; would also act as medical director for nursing home. Salary 100% of intake. Contact: Administrator, Wakulla Manor Nursing Home, P.O. Box 508, Crawfordville, Florida 32327. Phone: (904) 926-7181.

GENERAL PRACTITIONER OR INTERNIST: Excellent opportunity, assume long established practice with a multispecialty group. Present associate leaving the area. Florida license required. Please submit curriculum vitae to John F. Kerwick, Hollywood Clinics, P.A., Box 2308, Hollywood, Florida 33022. Phone: (305) 923-4646.

FAMILY PRACTITIONER. Growing community in northeast Florida offers immediate opportunity to establish private practice. Excellent schools, beautiful beaches, year-round outdoor recreation. Contact: Claude Weeks, Executive Director, Flagler Hospital, P.O. Box 100, St. Augustine, Florida 32084. Phone: (904) 824-8411.

FAMILY PRACTITIONER - INTERNIST: Excellent opportunity facilities with three practitioners in solo practice. Major equipment provided. Rent $250 per month. Competent laboratory and x-ray departments with income based on use. Bookkeeping system and receptionist shared. Contact: T. C. Kenaston Jr., M.D., P.O. Box 550, Cocoa, Florida 32922.

FLORIDA KEYS: Family Practitioner for delightful waterfront resort community. Modern, busy, totally equipped, four man, indepth, teaching-oriented family practice. Encourage creativity and expression in growing team. Friendly environment, live the good life, financial security, opportunity for partnership available. 70-bed JCAH hospital adjacent. Need bright, warm, FAMILY PRACTITIONER who cares. Send C.V. to 2855 Overseas Highway, Marathon, Florida 33050 or call Administrator (305) 743-2111 afternoons or evenings.

COUNTY HEALTH DEPARTMENT, opening for career Physician II, outpatient primary care, 40 hours per week. Benefits of sick and annual leave, hospitalization, life insurance and retirement. Call W. F. Hill, M.D., Director, Polk County Health Department. Phone: (813) 294-7481.

**SPECIALISTS**

HEMATOLOGIST-ONCOLOGIST for town in southwest Florida. Write C-885, P.O. Box 2411, Jacksonville, Florida 32203.

EXCELLENT OPPORTUNITY for Board Certified Urologist; needed for fast growing town in coastal southwest Florida. Write C-885, P.O. Box 2411, Jacksonville, Florida 32203.

INTERNIST — Excellent opportunity for physician to practice internal medicine in expanding North Florida community. No internist currently practicing in community. Attractive 128-bed new hospital which provides excellent facilities for treatment. For additional information contact John E. Knight, Administrator, Lake Shore Hospital, Lake City, Florida 32055. Phone: (904) 752-2560.

CENTRAL FLORIDA MULTISPECIALTY CLINIC HAS OPENING for second general surgeon. Good financial opportunity; new well equipped office near three hospitals. Write C-893, P.O. Box 2411, Jacksonville, Florida 32203.

SEEKING PHYSICIANS TO RELOCATE TO MARIANNA, FLORIDA, trade area of 40,000 people. Professional study and medical staff supports the recruitment of an OB-GYN, Urologist, Orthopedist, Internal Medicine to supplement the 12 already here. New 90-bed hospital now under construction. Ideal small town living conditions. Financial and business assistance available to qualified physicians. Phone: (904) 526-2200 — Elwin O'Steen.

EMERGENCY PHYSICIAN with postgraduate training or three years experience for prestigious University General Hospital in Tampa, Florida. 600 beds, 45,000 plus visits per year with brand new 17,000 square feet Emergency Department. Guaranteed income for 44 hours per week with two weeks education leave and two weeks vacation. Malpractice paid. Please send curriculum vitae, three letters of recommendation and direct all inquiries to: Philip J. Fagan Jr., M.D., Medical Director, P.O. Box 9639, Marina del Rey, California 90291. Phone: (213) 822-1312.

NEUROLOGIST, badly needed for coastal southwest Florida area. Have CV sent to C-885, P.O. Box 2411, Jacksonville, Florida 32203.

INTERNIST - CARDIOLOGIST: Two man practice seeks badly needed associate with immediate availability possible. Excellent opportunity in well-established internal medicine, noninvasive cardiology practice. Write C-904, P.O. Box 2411, Jacksonville, Florida 32203.

WANTED: INTERNISTS FOR PRIVATE, nonprofit facility under construction. Positions available March 1, 1979. Excellent compensation package. No overhead. Contact: Mid-County Medical Center, 2001 Palm Beach Lakes Boulevard, Suite 202, West Palm Beach, Florida 33409 or call (305) 684-1120.

WEST PALM BEACH: Solo practitioner Internist seeking Internist, board eligible or certified. Subspecialty in Cardiology preferred. Write C-907, P.O. Box 2411, Jacksonville, Florida 32203.

GENERAL SURGEON. Associate wanted. Miami. Please send Curriculum vitae to C-911, P.O. Box 2411, Jacksonville, Florida 32203.

PSYCHIATRIST. IMMEDIATE OPENING. Full-time private solo practice, or may affiliate part-time with Tri-County Mental Health Association. Contact: Claude Weeks, Executive Director, Flagler Hospital, P.O. Box 100, St. Augustine, Florida 32084. Phone: (904) 824-8411.

## MISCELLANEOUS

PHYSICIANS IN ALL SPECIALTIES NEEDED for new medical center next to TOP OF THE WORLD in Clearwater in condominium area with 7,000 residents, possibly doubling in two years. For information: A. M. Touchette, Realtor, 2380 World Parkway Boulevard, Clearwater 33515. Phone: (813) 733-7752.

DIRECTOR, BROWARD COUNTY HEALTH & MEDICAL DEPARTMENT: Full-time position, exempt, directly responsible to the Broward County Administrator. The Director of this one (1) of seven (7) County Administrative-Subdivisions, shall be responsible for the management, operation and control of health and medical services. The Department of Health & Medical Services includes the Divisions of: Alcoholism & Drug Abuse Services, Animal Control Services, Emergency Medical Services, Health Department, Medical Examiner Services, Mosquito Control Services and Primary Health Care Services. The Department of Health & Medical Services coordinates its activities with all related advisory and regulatory boards, and all other nonprofit health agencies providing services in Broward County. The Broward County Director of the Health & Medical Department shall hold the degrees of Doctor in Medicine and Master in Public Health, be a Florida licensed Doctor of Medicine, shall have proven administrative ability and shall have at least five (5) years experience in Public Health and Preventive Medicine. Good salary and fringe benefits. For further details, apply to Dr. E. L. Matta Jr., Director, Broward County Health & Medical Department, 416 S. W. First Avenue, Fort Lauderdale, Florida 33301. Include copy of Curriculum Vitae with application.

### Situations Wanted

GENERAL AND VASCULAR SURGEON, 35, university trained, board certified, Florida licensed. Seeks practice opportunity, solo, partnership or group. Available 3 months notice. Write C-837, P.O. Box 2411, Jacksonville, Florida 32203.

PATHOLOGIST — Certified CP/AP, Florida licensed, native U.S., excellent C.V. and experience as director. Current postgraduate training and certification through 1980. Write P.O. Box 11158, 227 East Ontario Street, Chicago, Illinois 60611.

ORTHOPAEDIST — 35, board eligible, married, university trained, experience includes reconstruction and hand with Florida license. Seeks private practice situation. Write: C-897, P.O. Box 2411, Jacksonville, Florida 32203.

SITUATION WANTED: 37 year old, Board Certified, OB-GYN specialist, subspecialty Boards in perinatology, seeks solo or group practice. Write C-899, P.O. Box 2411, Jacksonville, Florida 32203.

UNIVERSITY TRAINED GENERAL SURGEON wishes to join practice. Contact: M. Lane, M.D., 7901 Henry Avenue, Philadelphia, Pennsylvania 19128.

FAMILY PRACTITIONER: 30, completing residency June 1979. Seeking partnership, associate or small family practice group in Broward or Palm Beach County area. C. V. on request. Mark H. Krotowski, M.D., 7-29 Hegeman Avenue, Apt. 3H, Brooklyn, New York 11212. Phone: (212) 498-3070.

FAMILY PRACTITIONER, 31, board eligible, seeks group, associate, partnership or solo in southern Florida. Available February 1st. Florida license applied for. Please reply: 19781 Futura Drive, Yorba Linda, California 92686.

PSYCHIATRIST, BOARD CERTIFIED, FLORIDA LICENSED, AGE 47, seeks private practice situation or full-time position with possibility of private practice in East or West Florida coastal areas. Experienced in various psychodynamic therapies, consultation, community mental health, and administration. Currently holds senior administrative/clinical position in Mid-South University Medical Center. Reply C-909, P.O. Box 2411, Jacksonville, Florida 32203.

ORTHOPAEDIC SURGEON — Young, American, university trained, board certified, with military obligation satisfied. Experienced in trauma, joint replacement, arthroscopy, etc. Write C-910, P.O. Box 2411, Jacksonville, Florida 32203.

INTERNIST/PULMONARY PHYSICIAN, 28, university trained, ABIM, trained in all aspects of pulmonary including intensive care, respiratory therapy and fibroptic bronchoscopy. Available July 1979. Contact: H. Gogia, M.D. Phone: (215) 221-4546.

PEDIATRICIAN, 34, board eligible, Florida license, seeks position on or near coast. Reasonable hours major concern. Jill Gallien, M.D., 1324 Northwestern, W. Lafayette, Indiana 47906. Phone: (317) 463-5166.

BOARD CERTIFIED GENERAL SURGEON seeks position, solo, group, or partnership. Willing to do some general practice. Available on short notice. Reply to C-912, P.O. Box 2411, Jacksonville, Florida 32203.

RHEUMATOLOGIST, INTERNIST, ABIM, certified in rheumatology. Florida license, seeks practice, partnership or group, South Florida. Currently full time directing. Residency program in university hospital. Will consider similar academic position. Write C-913, P.O. Box 2411, Jacksonville, Florida 32203.

### Practices Available

GENERAL AND VASCULAR SURGERY PRACTICE FOR SALE. Excellent gross. Fully equipped. Very reasonable. Write C-901, P.O. Box 2411, Jacksonville, Florida 32203.

CENTRAL FLORIDA FAMILY PRACTICE FOR SALE. Growing practice in Maitland with a 95% collection rate. Partially equipped condo-office in medical complex with 1,200 sq. ft. of office space. Owner retiring. For details call (305) 647-6454 or 830-0570.

ONCOLOGIST/INTERNIST, planning to return to academic medicine, seeks colleague to buy or assume lucrative busy practice. Modern, fully equipped office designed for two physicians. Superb location, South Florida Gold Coast, convenient to hospitals, housing, highways. You must see this opportunity to believe it. Reply with phone number to C-908, P.O. Box 2411, Jacksonville, Florida 32203.

## Equipment

NEW AUTOMOBILES. Save up to $1,000 on all U.S. makes. Statewide delivery with full warranty. For quote send itemized needs to Aristocrat Auto Brokers, 11125 S.W. 74th Ave., Miami 33156.

79 AUTOMOBILES AT FLEET DISCOUNT PRICES delivered to factory dealers with full warranty. Contact Princes's JORC M3-203. Jupiter, Florida (305) 746-3716. List car and accessories.

## Real Estate

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OUTSTANDING LOCATION FOR SPECIALIST: St. Nicholas Medical Center. Central location, off street parking and all utilities furnished (including janitor service). Contact W. G. Allen, Jr., Owner-Manager, St. Nicholas Medical Center, 3127 Atlantic Boulevard, Jacksonville 32207. Phone: (904) 398-5500.

FLORIDA — (SOUTHEAST) — DELRAY: Offices for lease in single story medical plaza adjacent to Interstate-95; busy intersection and newly built convalescent center; tremendous opportunity to grow with a rapidly growing middle class community of single-family and condominium dwellings. Contact: Lawrence M. Landis, 900 S. Congress Ave., Delray, Florida 33445. Phone: (305) 278-0062.

FOR LEASE: NEW MEDICAL OFFICE (1,725 sq ft.) near North Florida Regional Hospital and I-75. Parking space for four employees and six or seven patients. Very near large shopping center on Newberry Road. Will lease for $7 per square foot per year excluding electricity and gas. Contact C. T. Fletcher, M.D., 6830 N. W. 11th Place, Gainesville, Florida (904) 376-5239.

FLORIDA (SOUTHWEST) SARASOTA: Offices for lease. Three medical or dental suites in very deluxe building and surroundings in a rapid growth area. Contact: George P. Chabator, M.D., 8800 S. Tamiami Trail, Sarasota, Florida 33581. Phone (813) 966-3240.

PHYSICIAN'S OFFICE FOR SALE OR RENT IN SARASOTA. Complete and fully equipped: wall to wall carpet, air conditioning, three treatment rooms, waiting room, reception area, two rest rooms and storage room. For information: Leslie R. Blackburn, 901 Norsota Way, Sarasota, Florida 33581.

TARPON SPRINGS: Finally, Medical/Dental office space is available in prime Tarpon Springs location; attractive reception area plus 7 rooms — 1,500 sq. ft. Just $525 per month. Also, at same location; 1,000 sq. ft. — reception room plus 3 offices — $350 per month. Both immediate occupancy and ample parking. Phone: (813) 937-3111.

WELL EQUIPPED MEDICAL OFFICE FOR SALE, RENT $100/month. X-ray, EKG, two examining rooms. Downtown Hollywood. Call (305) 921-8924.

TWO ATTRACTIVE MEDICAL OR DENTAL SUITES (1,250 sq. ft. and 1,035 sq. ft.) in beautiful Coral Reef Professional Building just off U.S. 1. All utilities. Phone; (305) 251-3434 from 9 a.m. - 5 p.m. Monday - Friday.

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2,570 SQ. FT. NEW MEDICAL BUILDING convenient to International, Parkway and North Miami hospitals. Call Mr. Cornelius — J. A. Stone, Realtors-Century 21, Miami. Phone: (305) 652-6123.

WATER FRONT HOME — ST. JOHNS RIVER — ORANGE PARK: An interesting design concept with nearly every room facing the water with sliding glass doors to the river. Kitchen overlooks natural woods. Cement bulkhead and secluded. By appointment (904) 264-4407.

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**Florida Medical Association Annual Meeting, May 23-27, 1979**

ROCHE

# For recurrent attacks of urinary tract infection in women

# Bactrim™ DS Double Strength Tablets

Each tablet contains 160 mg trimethoprim and 800 mg sulfamethoxazole.

## Just one tablet b.i.d. for 10 to 14 days

- Action at urinary/vaginal/lower bowel sites helps eliminate reservoirs of infecting organisms
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- Low incidence of bacterial resistance in community practice
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- Contraindicated during pregnancy and the nursing period. During therapy, maintain adequate fluid intake; perform CBC's and urinalyses with microscopic examination.

**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms:** *Escherichia coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris, Proteus morganii.* **It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination.** *Note:* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

**Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.**

The recommended quantitative disc susceptibility method (*Federal Register,* 37:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

**Contraindications:** Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers; infants less than two months of age.

**Warnings:** Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

**Precautions:** Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

**Adverse Reactions:** All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

**Dosage: Not recommended for infants less than two months of age.**

*Urinary Tract Infections:* Usual adult dosage—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

Recommended dosage for children—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. A guide follows:

*Children two months of age or older:*

| Weight | | Dose—every 12 hours | |
|---|---|---|---|
| lbs | kgs | Teaspoonfuls | Tablets |
| 20 | 9 | 1 teasp. (5 ml) | ½ tablet |
| 40 | 18 | 2 teasp. (10 ml) | 1 tablet |
| 60 | 27 | 3 teasp. (15 ml) | 1½ tablets |
| 80 | 36 | 4 teasp. (20 ml) | 2 tablets or 1 DS tablet |

For patients with renal impairment:

| Creatinine Clearance (ml/min) | Recommended Dosage Regimen |
|---|---|
| Above 30 | Usual standard regimen |
| 15-30 | ½ the usual regimen |
| Below 15 | Use not recommended |

*Pneumocystis carinii pneumonitis:* Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

**Supplied:** *Double Strength (DS) tablets,* each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. *Tablets,* each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10. *Oral suspension,* containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole, fruit-licorice flavored—bottles of 16 oz (1 pint).

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FEBRUARY 1979 • VOL 66 • NO 2

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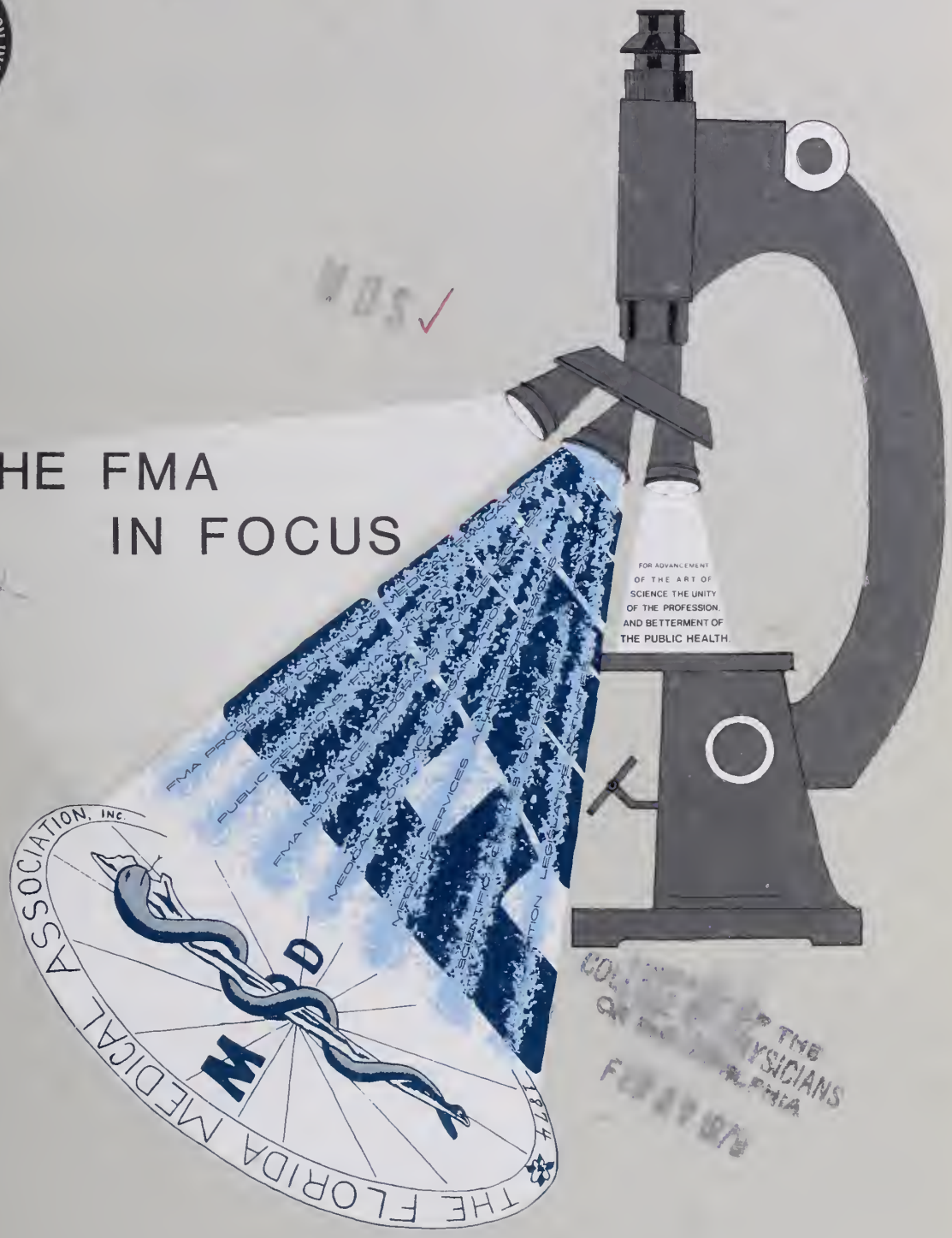


## SPECIAL ISSUE ON FMA PROGRAMS

Robert E. Windom, M.D.
Guest Editor

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**Contraindications:** Patients with known hypersensitivity to the drug.

**Warnings:** Warn patients that mental and/or physical abilities required for tasks such as driving or operating machinery may be impaired, as may be mental alertness in children, and that concomitant use with alcohol or CNS depressants may have an additive effect. Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported.

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

**Precautions:** In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

**Adverse Reactions:** Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

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**We are most grateful to Dr. Robert E. Windom, Guest Editor of this issue, for coordinating this information for the benefit of FMA members.**

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# Special Issue on FMA Programs

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# President's Page

## Diet! Diet!! Diet!!! Diet?

Forty million Americans are overweight and most of them seem to be my patients, my family and my friends.

Dr. Stillman's diet, the drinking man's diet, Dr. Atkins' diet, the grapefruit diet, the liquid protein diet, high carbohydrate diet, protein supplement and numerous other fad diets — health food stores, mega-vitamins, Vitamin E, Vitamin C, high fiber diet, organic foods (inorganic foods?), pesticides, preservatives, coloring and cancer; your diet is what you are? — cholesterol is bad, cholesterol is not so bad; triglycerides are bad, high or low density?; granulated sugar is poison; junk foods; fast service food — Weight Watchers, Diet Workshop, Overeaters Anonymous—!

The above constitute only a few of the names and phrases that aggravate and plague my daily practice, my meals at home and my social outings, to say nothing of the frustration of listening to the almost constant radio talk shows promoting some new author and his book on dieting which will make us healthy and happy into the ninth and tenth decades of life. Should we blame Adele Davis and Bernard McFadden for all of this?

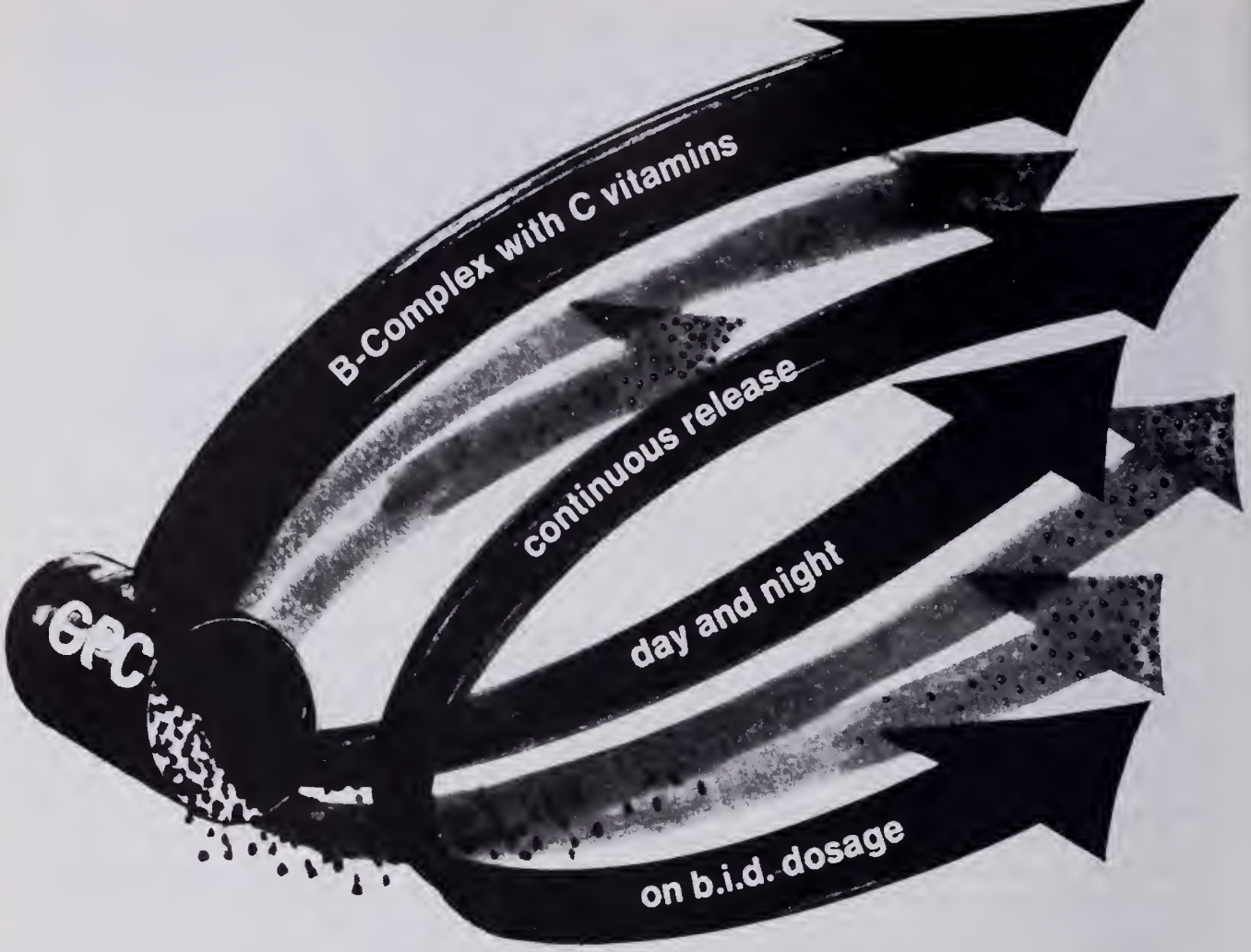
Politicians, social welfarists and much of the general public have accused the medical profession of being ignorant and not caring on the subject of nutrition. Nothing could be further from the truth. However, the *real* truth is hard to come by. There is much disagreement among nutritionists concerning the value, or lack of value, the danger or safety, the ideal vs. the practical in all our daily intake of food.

What is the ideal or well balanced diet? What is "three squares a day"? Like everything else in medicine, generalizations can seldom be made. Advice to the affluent would, of necessity, be different than to the migrant worker, whether it be a diet for weight reduction or for a brittle diabetic. Advice to a teenager would be different than that to a grandma, as would that to a Miami Dolphin lineman or to a hairdresser. Individualization within the framework of the doctor-patient relationship in the private practice of medicine has been and continues to be, the hallmark of the American system. However, some generalization seems to be necessary to answer some of the accusations by our critics. Our denials of ignorance and uncaring are not completely justified. Most of us need to know and care a great deal more about what everyone is talking about — *diet*.

These thoughts have contributed to the FMA's dedication this year to concentrate its scientific activities in the field of nutrition. With the able guidance of our Chairmen of Scientific Activities and Public Relations, including their Committees, we are producing movies for public education and developing editions of this journal as well as handbooks for our members and medical students. Our annual meeting in May will feature many internationally renowned speakers on the subject of nutrition and some of the specialty groups have this subject on their programs. Under consideration is the establishment of a State Nutrition Association with FMA sponsorship. Regional seminars on nutrition are already being organized.

If many of you share my aggravations and frustrations, then let's crack some of the "nuts" on this subject and debunk the cultists and profiteers by exhibiting our scientific knowledge and expertise in the area of nutrition.

O. Wm. Davenport M.D.

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# FROM THE EDITOR'S DESK

## LEGISLATIVE COMMITTEES

Florida House Speaker Hyatt Brown has announced committee appointments for the 1979-80 sessions. Speaker Pro Tempore Richard S. Hodes, M.D., of Tampa, will chair the Education Subcommittee of the Appropriations Committee, and also will sit on the Higher Education, Finance and Taxation, Retirement, Personnel and Collective Bargaining, and Rules and Calendar Committees. Rep. David J. Lehman, M.D., of Hollywood, will serve on the Criminal Justice and Health and Rehabilitative Services Committees. Rep. William G. Myers, M.D., of Hobe Sound, was appointed to Community Affairs and Health and Rehabilitative Services. The House scheduled interim committee meetings for January 8-11, February 5-8, and March 5-8, leading up to the April 3 opening of the 1979 legislative session. Senate committee meetings were scheduled for January 9-11, February 6-8, and March 6-8.

## "SUNSET" GUIDELINES

The Florida House's Committee on Regulatory Reform has developed guidelines to be used in the review of professional and occupational boards under the "Sunset Act." The Committee ws divided into three subcommittees, and the one that will have jurisdiction over the Florida Board of Medical Examiners is chaired by Rep. Elaine Gordon, a Dade County Democrat. Other subcommittee members are Duval Democrats Arnett Girardeau and Carl Ogden; Gene Campbell, Palm Beach Democrat; Linda Cox, Broward Democrat; Ron Johnson, Bay Democrat; and Pete Dunbar, Pinellas Republican. Committee Chairman George Sheldon also named Representative Ogden to chair a subcommittee to develop proposals on health care cost containment.

## HMO DISSOLVES

With losses of about $40,000, the first Health Maintenance Organization funded by the Federal Government to demonstrate alternatives in health care delivery is going out of business. Sound Health Association of Tacoma, Washington, had been cranked up five years ago at a cost of $300,000. Over the years $2.5 million in federal loans went into it.

## MAJORITY LEADER

Rep. Sam Bell of Volusia County, Florida House Majority Leader, addressed a joint meeting of the FMA Councils on Legislation and Regulations and Specialty Medicine on December 9. Mr. Bell listed reorganization of the Department of Health and Rehabilitative Services to include a clearly defined health component; Medicaid reorganization; Workmen's Compensation; care for the elderly; and health care costs as among important issues with which the Legislature must come to grips this year.

## COST INCREASE

The physician's services component of the Consumer Price Index was up by 0.6% last October, compared with the increase of 0.8% posted the previous month. The all items index was up 0.8% both months. Hospital charges were up 1.6% in October, compared with September's 0.4%.

The fact that many hospitals begin their new fiscal years in October and imposed rate increases at that time is blamed for the increase in the index.

## MOVE TO CAPITAL

Some medical organizations have been going where the action is — Washington, D.C. The latest American Association of Foundations for Medical Care and the American Association of Professional Standards Review Organizations, which have been based in Stockton, Calif. — are moving to the Capital.

## WORLD MEDICAL ASSOCIATION

The AMA has rejoined the World Medical Association, an organization it helped found more than three decades ago. The rejoining follows WMA's adoption of new by-laws which provide a system of proportional representation. AMA had dropped out in 1974.

**The Editor**

# MEDICAL MESSAGE

from the Florida Doctors

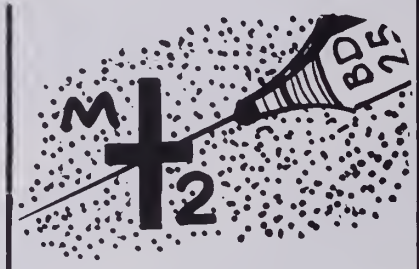
## Immunization

It is relatively easy to ignore something you aren't confronted with daily. That leaky faucet may get fixed in the next few days, but you may put off getting your children immunized because the threat of serious illness doesn't seem realistic - - - at least not today.

Modern medicine has succeeded in thwarting illnesses which once threatened lives, but your physician cannot pass on the benefits of such technology without your help.

Unfortunately, we are not rid of diseases such as polio, diphtheria, rubella, measles and pertussis, but a great many people have been lulled into falsely thinking these maladies have been eradicated. On the contrary, due to a lack of concern, these diseases which once appeared to be headed for extinction, are now being diagnosed more and more often.

In the early 1950's public concern over the crippling threat of polio and parental anxiety over the 20,000 plus cases discovered annually, resulted in mass immunizations. The disease appeared headed for doom until recent years when polio is again being diagnosed in a number of children. Health experts estimate 30 to 40% of American children have not received the vaccine, although it is readily available to all.




Similar estimates of resurging incidents and poor immunization figures are available for other potentially crippling illnesses which usually attack children.

Of children under 15 years of age, it is estimated that nearly 40% have not been immunized.

Florida's physicians urge parents to take the time to have their children immunized. The slight investment will return benefits later as healthy youngsters grow up free from the threat of serious disease.

***This is a medical message from the Florida Medical Association in behalf of the doctors of Florida and as a public service feature***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AVAILABLE ONLY ON PRESCRIPTION
Brief Summary
**INDICATION:** Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.
**CONTRAINDICATIONS:** Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).
**WARNINGS:** If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. *Drug Dependence* Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy:* Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children:* Tenuate is not recommended for use in children under 12 years of age.
**PRECAUTIONS:** Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.
**ADVERSE REACTIONS:** *Cardiovascular:* Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System:* Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal:* Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic:* Urticaria, rash, ecchymosis, erythema. *Endocrine.* Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System:* Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous:* A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.
**DOSAGE AND ADMINISTRATION:** Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in midevening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.
**OVERDOSAGE:** Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.
Cayey, Puerto Rico 00633
*Direct Medical Inquiries to*
MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
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References: 1. Citations available on request — Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M.: A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

**Merrell**

8-3921 (Y587A)

# Whether overweight is a complicating factor... or just uncomplicated overweight.

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## (diethylpropion hydrochloride NF)

**75 mg. controlled-release tablets**

### A useful short-term adjunct in an indicated weight loss program.

Overweight patients in certain diagnostic categories often require strict obesity control. Diethylpropion hydrochloride has been reported useful in obese patients with hypertension, symptomatic cardiovascular disease, or diabetes. While it is not suggested that Tenuate in any way reduces these complications in the overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. (Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.)

### In uncomplicated obesity.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

### Clinical effectiveness.

The anorexic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.[1] And the unique chemistry of Tenuate provides ".. anorexic potency with minimal overt central nervous system or cardiovascular stimulation."[2] Compared with the amphetamines, diethylpropion has minimal potential for abuse.

**Tenuate—it makes sense. And it's responsible medicine.**

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For prescribing information see opposite page

# The evidence of experience

Since October 1974 when Motrin® (ibuprofen) was introduced in the United States, it has been used by more than 6,000,000 patients with rheumatoid arthritis* or osteoarthritis. Rarely has an ethical pharmaceutical product been prescribed for so many patients in so short a time. In addition, more than 450 studies presenting new data related to Motrin have been published.

The 6,000,000 patients already treated with Motrin is an objective measure of physicians' confidence in the ability of Motrin to relieve the pain and inflammation associated with rheumatoid arthritis and osteoarthritis.

So it is not surprising that in this short period Motrin has become the most frequently prescribed alternative to aspirin. Motrin relieves joint pain and inflammation as effectively as indomethacin or aspirin, but causes significantly fewer CNS and milder GI reactions.
However, gastrointestinal bleeding, sometimes severe, has been associated with Motrin, aspirin, indomethacin, and other nonsteroidal antiarthritic agents.

*The safety and effectiveness of Motrin have not been established in patients with Functional Class IV rheumatoid arthritis (incapacitated, largely or wholly bedridden, or confined to wheelchair; little or no self-care).

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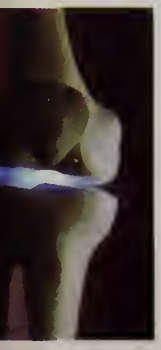

# Motrin 400 mg TABLETS
## ibuprofen, Upjohn

**The confidence that comes from experience—one more reason to prescribe Motrin.**

Please turn page for a brief summary of prescribing information.

**Upjohn** The Upjohn Company, Kalamazoo, Michigan 49001

685 4

The confidence that comes from experience—
one more reason to prescribe

# Motrin 400 mg TABLETS
ibuprofen, Upjohn

**Indications and Usage:** Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

**Contraindications:** Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

**Warnings:** Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

**Precautions:** Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

**Drug interactions.** *Aspirin* used concomitantly may decrease Motrin blood levels. *Coumarin:* Bleeding has been reported in patients taking Motrin and coumarin.

**Pregnancy and nursing mothers:** Motrin should not be taken during pregnancy or by nursing mothers.

**Adverse Reactions**

*Incidence greater than 1%*

**Gastrointestinal:** The most frequent type of adverse reaction occurring with Motrin (ibuprofen) is gastrointestinal (4% to 16%). This includes nausea*, epigastric pain*, heartburn*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness*, headache, nervousness. **Dermatologic:** Rash* (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

Incidence: Unmarked 1% to 3%; *3% to 9%.

*Incidence less than 1 in 100*

**Gastrointestinal:** Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

*Causal relationship unknown*

**Gastrointestinal:** Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

**Overdosage:** In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

**Dosage and Administration:** Suggested dosage is 300 or 400 mg t.i.d. or q.i.d. Do not exceed 2400 mg per day.

**How Supplied**

| | |
|---|---|
| **Motrin Tablets, 300 mg** (white) | |
| Bottles of 60 | NDC 0009-0733-01 |
| Bottles of 500 | NDC 0009-0733-02 |
| **Motrin Tablets, 400 mg** (orange) | |
| Bottles of 60 | NDC 0009-0750-01 |
| Bottles of 500 | NDC 0009-0750-02 |
| Unit-dose package of 100 | NDC 0009-0750-06 |
| Unit of Use bottles of 120 | NDC 0009-0750-26 |

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# Dean's Page

## The University of Miami School of Medicine And Its Relationship to Latin America

**E. M. Papper, M.D.**

North American medicine has maintained an important influence on the development of medical education and health care in Latin America since the early 1950's. In support of this trend, the University of Miami School of Medicine has developed strong ties with many countries in Central and South America.

In 1951, we established an International Program in Medical Education which has enabled Cuban refugee physicians, along with other Latin American physicians, to complete successfully the E.C.F.M.G. examinations. On a less formal basis, the clinical departments of the University of Miami School of Medicine have established several collaborative research programs and postgraduate traineeships. We have also provided clinical care to patients referred to our medical center. This relationship is a natural outgrowth since geographically, sociologically and economically, we are well situated to extend many educational, research and patient care activities to the Latin American sector of the hemisphere. This is even more appropriate since the Latin American culture has profoundly influenced our own development for nearly two decades and, as a result, South Florida has become a cultural crossroad.

It is unfortunate that at a time when the need for wider and better health care is at a premium in Latin American countries and when the transfer of medical and health care technologies is urgently required, limitations have been introduced by the federal government which can and may already be jeopardizing the mutually beneficial effects derived from the cultural and scientific exchange that has been built in the past years. The University of Miami School of Medicine is committed to enhancing its relationship with Latin America. Toward this end, the Dean's Office recently re-established and substantially strengthened this School's Committee on Latin American Affairs.

We plan to establish a new administrative position early in 1979, which will coordinate all of our activities with Latin America. Some of the objectives of our School's activities will be focused in the following areas:

1. Attempt to modify present federal legislation which makes it extremely difficult for Latin American physicians to obtain postgraduate training in the United States. Our School feels a strong responsibility for training highly qualified academicians to return to Latin America for the purpose of educating others in the best methods of providing health care. Unfortunately, at the present time there are conflicting views on this subject in various government agencies. The Department of State is quite eager to maintain good relationships with Latin America. The Department of Labor is concerned with protecting American physicians and health personnel by reducing the number of foreign health care professionals coming to practice in this country. The Department of Health, Education and Welfare appears to be somewhere in the middle but concerned with the possibility of an oversupply of physicians. Since the implementation of the Health Manpower legislation in 1976, Latin American physicians have been forced to look to the Iron Curtain for specialized training of graduate physicians. Clearly, this is not in the best interest of the United States and is not favored by leaders in Latin American countries. With all this in mind, we have established a legislative committee with an

Dr. Papper is Vice President for Medical Affairs and Dean, University of Miami School of Medicine, Miami.

objective to modify the present laws and enable graduate trainees to enter the United States for the purpose of improving their clinical skills. Such a provision is feasible as long as it is recognized that such individuals must return to their own country and not take positions that can be filled by our own graduates.

2. Because of our geographic location, patients are frequently referred from Latin America for special health problems. It is important that we streamline the mechanism by which these patients receive their health care delivery. The patient must be referred to a specific physician and properly housed. In conjunction with Jackson Memorial Hospital, Anne Bates Leach Eye Hospital, and the University of Miami Hospital and Clinics, we plan to provide a coordinated patient referral system for patients from Central and South America.

3. During the past several years, the School of Medicine has also developed a number of collaborative research efforts in Latin America. We are now conducting an inventory to determine the full scope of our biomedical research activities in Latin America. We are extremely enthusiastic about our potential to expand activities in such areas as epidemiology and public health, dermatology, infectious disease and cancer control.

4. Physicians from Latin America frequently attend our Continuing Medical Education courses sponsored by departments at the University of Miami School of Medicine. It is our intention to develop a more formal Continuing Medical Education program with Latin America. These programs will be conducted in other Latin countries by physicians who are fluent in Spanish, and, where appropriate, in Portuguese. Many of these programs will also be conducted in Miami in Spanish and in Portuguese. We have had marked success with our programs in Latin America and believe that we have established a well-conceived format.

Finally, I must emphasize that our first priority will be to serve the educational needs of the Latin American countries. Any benefits to the University or the School of Medicine are a byproduct of this unique opportunity to work with our neighbors.

● Dr. Papper, University of Miami School of Medicine, P.O. Box 016960, Miami 33101.

---

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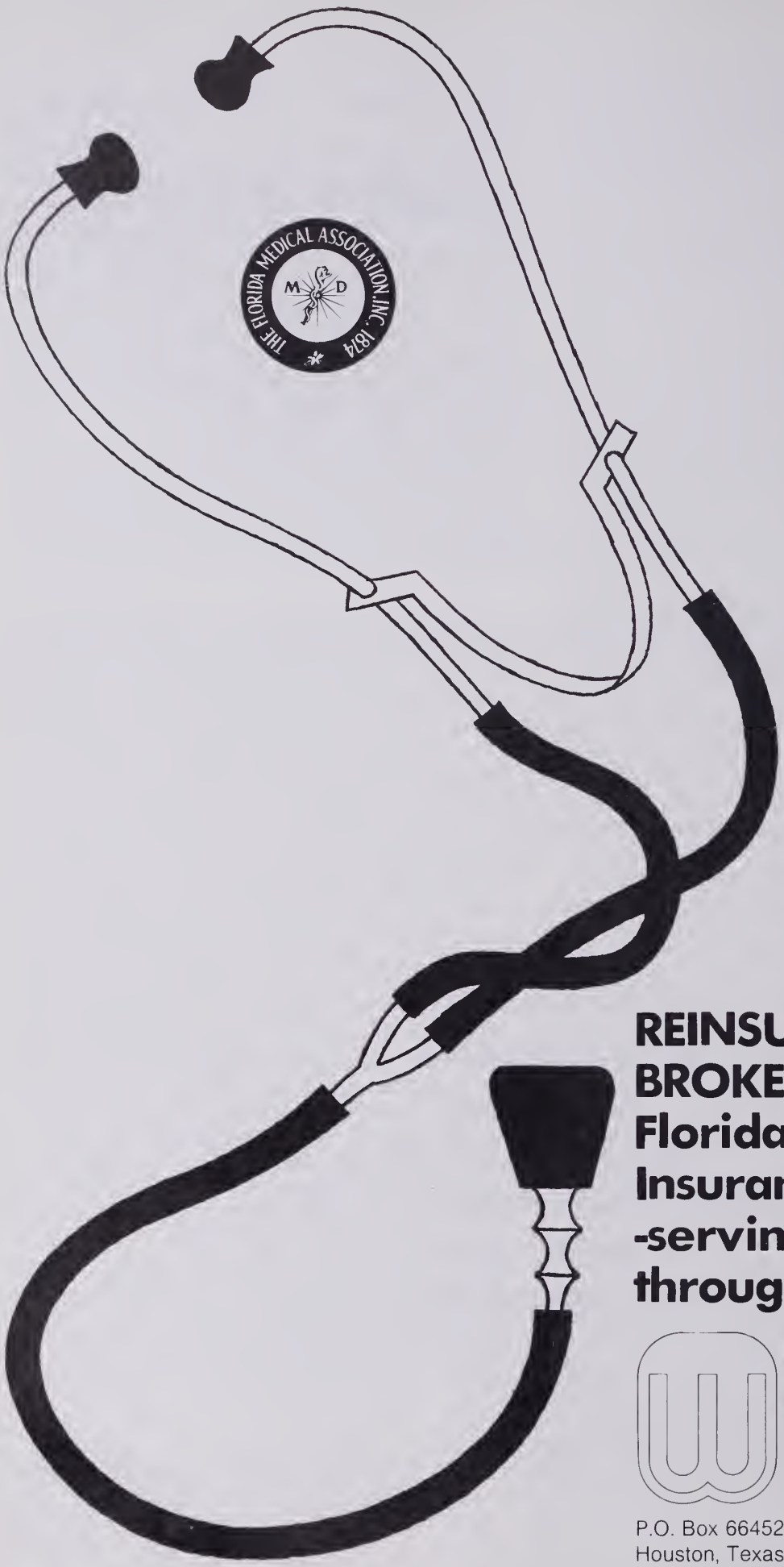


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# LEGISLATIVE NEWS

The 1978 Florida legislature enacted several bills of both direct and indirect interest to physicians of the State. The following summary of some of these new laws was prepared by the FMA Capital Office:

### SB 169 (Ch. 78-171)

Requires hospitals to offer pap smears and *manual* breast examinations to women 18 years of age or older unless they are determined to be contraindicated or inappropriate by the attending physician or hospital records show that such tests were performed within the preceding 12 months.

This law also requires hospitals to report to the Department of Health and Rehabilitative Services certain information regarding cancer cases. The Department shall also establish or establish by contact with a recognized medical organization in Florida a statewide cancer registry program. All information collected shall be privileged and identities of persons on whom reports are made will be confidential. The Department is further charged with reporting to the Legislature on plans for follow up on reported cases.

By this law, hospitals will be required to furnish, upon request and only after the patient is discharged, a true and correct copy of all records in the hospitals possession (except progress notes and consultation report sections of a psychiatric nature) to any person admitted for treatment or any person designated by the patient. A reasonable copying fee is allowed. Access to microfilms or other original records is to be allowed according to procedures established by the hospital.

The law became effective October 1, 1978.

### SB 346 (Ch. 78-87)

Requires the Board of Medical Examiners to temporarily suspend a physician's license to practice medicine without a hearing, pending a full hearing, if *in the opinion of the director and two members of the board* the evidence in support of certain violations is clear, competent and unequivocal.

The board may now take such action when an organized medical staff of a hospital, health maintenance organization, or ambulatory surgical center, charges a physician with immoral or unprofessional conduct, incompetence, negligence, willful misconduct, or the failure to conform to the standards of acceptable and prevailing medical practice in his area of expertise.

The law carried an effective date of May 29, 1978.

### SB 1014 (Ch. 78-335)

Requires physicians to obtain written informed consent from their patients prior to performing electroconvulsive therapy or psychosurgical procedures. Certain information regarding the purpose of the procedure, common side effects, alternative treatment modalities and number of procedures as well as the ability to revoke consent at anytime is required to be given to the patient.

In addition to the above, a second opinion supporting the proposed procedures must be received and documented prior to initiating the procedures.

July 1, 1978 was the effective date.

### SB 706 (Ch. 78-373)

Updates Florida's radiation protection responsibilities. The law requires a single system of regulation, in harmony with those of other states and compatible with the standards and regulatory programs of the Federal Government for by-product, source, and special nuclear materials.

The Department of Health and Rehabilitative Services is the designated state agency to handle radiation protection responsibilities. The Department's responsibilities include licensing, inspections, information and record maintenance and training. Emergency powers are granted to the Department to protect the public's health and safety.

The effective date was July 1, 1978.

### SB 798 (Ch. 78-294)

Requires the Department of Health and Rehabilitative Services to make available under the Medicaid program the services of nurse midwives.

The law also requires all other third party medical benefits to be exhausted prior to the use of Medicaid funds.

July 1, 1978 was the effective date.

*(To be continued next month).*

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# Professional Liability Legal Update

### Death with Dignity Allowed

The Fourth District Court of Appeal ruled that a trial judge was correct in permitting the removal of a mechanical respirator from a competent, but terminally ill adult.

The patient, 73-year-old Abe Perlmutter, was suffering from amyotrophic lateral sclerosis (Lou Gehrig's disease). The court recognized that there was no cure for the disease, and that Mr. Perlmutter's affliction had progressed to the point that, even with the respirator, he would die within a short time. Notwithstanding his physical condition, Mr. Perlmutter remained in command of his mental faculties and was legally competent. With complete awareness of the inevitable result and with full approval of his family, Mr. Perlmutter sought to have the respirator removed.

In challenging Mr. Perlmutter's right to have the respirator disconnected, the State's Attorney contended, among other things, that termination of treatment would amount to suicide. The court rejected the State's contention stressing that Mr. Perlmutter had previously testified that he really wanted to live, but that he only wanted to do so under his own power. This basic wish to live, plus the fact that Mr. Perlmutter's affliction was not self-induced, persuaded the court that his refusal of treatment should not be classified as suicide. The court further felt that there was a substantial distinction in the State's insistence that human life be saved where the affliction is curable, as opposed to the situation where, as in this case, "the issue is not whether, but when, for how long, and at what cost to the individual his life may be briefly extended."

Although expressly limiting its holding to the facts presented to it, the court held that, based upon his constitutional right to privacy, Abe Perlmutter should be allowed the right to refuse or discontinue treatment and die with dignity. *Satz v. Perlmutter, 362 So. 2nd 160 (Fla. 4th DCA 1978.)*

### Claimant Need Not Present Evidence at Mediation Hearing

In presenting a claim in medical mediation, the claimants chose not to offer any evidence before the mediation panel when it met to consider the case. The panel thereupon found for the defendants, but qualified its decision by stating "... because the claimants chose not to present any evidence." Thereafter, plaintiffs sued their physician and hospital for malpractice. On motion of the defendants, the trial judge dismissed the complaint with prejudice, holding that the plaintiffs were required to present evidence before the mediation panel in order to comply with Section 768.44, Florida Statutes (Florida Medical Mediation Statute).

This decision was appealed and ultimately reached the Supreme Court by way of certification from the Third District Court of Appeal. In agreeing with the District Court's reversal of the trial court, the Supreme Court held that Section 768.44 does not require a plaintiff to present evidence in support of his claim at the mediation hearing as a condition precedent to his right to sue. However, the Supreme Court also felt that the District Court was correct in holding that the panel had transgressed the limitations of Section 768.44 by including the qualifying phrase in its finding, and, thus, held that the conclusion which a mediation panel may reach must be limited to a single finding of either actionable or no actionable negligence. *Fisher v. Herrera _____ So. 2nd _____ (Case No. 53,646, decided December 21, 1978.*

### Statutory Time Limits Apply Regardless of Justification

Where the statutory 10-month period in which to hold a hearing on the merits of a medical malpractice mediation claim had expired without the required hearing being held, termination of the jurisdiction of the medical mediation panel was correct even though the hearing was not held solely because of the death of one of the panel members. *Cole v. Burrows, 364 So. 2nd 502 (Fla. 4th DCA 1978).*

### Limitations Period Tolled by Answer of One Defendant

The First District Court of Appeal recently held that, under Florida's Medical Malpractice Act, where a claim is filed against several defendants, the filing of an answer by one of the defendants within the required twenty days will toll the two-year statute of limitations applicable to medical malpractice claims as to all of those against whom the claim is filed. *Baptist Memorial Hospital v. Beatty, 364 So. 2nd 546, (Fla. 1st DCA 1978).*

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Prepared and submitted by Office of Legal Counsel, Professional Insurance Management Co. (PIMCO), Jacksonville, Fla.

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LORIDA MEDICAL ASSOCIATION
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DONALD C. JONES, Executive Director

# Summary of the FMA Board of Governors Meeting January 13 - 14, 1979

The following is a summary of the actions taken by the Board of Governors at its meeting on January 13 - 14, 1979.

**THE BOARD:**

**Assistant Secretary For Health**

Adopted as a top FMA legislative priority the establishment of an Assistant Secretary for Health with direct-line authority.

**Standardized Health Claim Form**

Directed that the FMA seek legislation to amend the law passed during the 1977 Session of the Legislature mandating a standardized health claim form, to allow for attachments provided they contain all necessary information required by the standardized form.

**Cost of Medical Care**

Adopted a policy statement on the cost of medical care outlining the FMA's evaluation of the factors contributing to the increase in the cost of medical care and recommendations for controlling these costs.

**PMUR Procedures**

Adopted amended procedures by which the Florida Medical Foundation will conduct Peer Medical Utilization Review for Medicare in Florida and renewed the contract with Blue Shield for PMUR subject to these procedures becoming a part of the contract.

**Impaired Physician Program**

Requested that while a statewide plan for an Impaired Physician Program is being developed that county medical societies be asked to establish some type of committee to aid physicians who need immediate assistance.

**Mandatory Pap Smear Law**

Directed that the FMA not initiate attempts to repeal the Mandatory Pap Smear Law passed during the 1978 Session of the Legislature but agreed to assist other allied groups such as the Florida Hospital Association should efforts be made to seek amendments to the law.

**State Board of Medical Examiners**

Supported appropriate legislation that would enable the State Board of Medical Examiners to contract with the FMA or FMF to assist the Board in carrying out its investigative activities and directed the FMA Ad Hoc Committee on the SMBE develop a FMA policy statement on the SBME.

**Resolution 78-16 Mediation Panel Questionnaire**

Resolution 78-16 was referred to the Board of Governors by the House of Delegates in May, 1978. The resolved of this Resolution called for the FMA to request the Florida Supreme Court to review the supplemental questionnaire for prospective mediation panel members to determine their appropriateness to serve and advise the Chief Judge of the Circuit.

The Board reviewed the questionnaire and observed that it could be construed to determine the impartiality of a panel member. It was noted that most physicians are cooperating and responding, but also recognized that should the use of the questionnaire become irrelevant and intended to harrass participants on mediation panels that appropriate action through the Supreme Court should be taken. The Board approved recommending to the House of Delegates that Resolution 78-16 not be accepted.

**FMA Medical Defense Fund**

Reiterated the purpose and criteria for the FMA Medical Defense Fund.

"Medical Defense Fund — A Medical Defense Fund is established by the Florida Medical Association for the defense of the good name of the Medical Profession and may be utilized through individual members of the Association willing to assist in defending the good name of the Medical Profession, provided the individual has the endorsement of his county medical society and is willing to return from the proceeds of any recovery the amount expended by the Association, said return being allocated to the Medical Defense Funds. In no event shall Medical Defense Funds be utilized to the inurement of individual Association members."

## COUNCILS AND COMMITTEES

### AMA Delegates

**National Health Insurance**

Received a report from Florida's AMA Delegates regarding passage of Resolution 62 introduced by the Florida Delegation regarding National Health Insurance in lieu of the recommendations of the AMA Board of Trustees and the Reference Committee for introduction of a comprehensive health insurance. The Florida Resolution provides that AMA introduce an NHI Bill **only** if absolutely necessary and that if such a bill is necessary that it contain **only** those principles outlined in the Florida Resolution.

1. Requiring minimum standards of adequate benefits in all health insurance policies sold in the United States with appropriate deductible and co-insurance.

2. A simple system of uniform benefits provided by the federal, state, and local governments for those individuals who are unfortunate enough (through no fault of their own, i.e., age, disability, financial hardship, etc.) not to be able to provide for their own medical care.

3. A nationwide program by the private insurance industry of America (and government if necessary for reinsurance) to make available catastrophic insurance coverage for those illnesses or individuals where the economic impact of a catastrophic illness could be tragic. All catastrophic coverage should have an appropriate deductible and co-insurance to make it economically feasible and to avoid abuse.

4. A program developed pursuant to these principles should be administered at the state level with national standardization through federal guidelines.

The Board also noted that there had been some confusion regarding the actions of the House as reported in the AM News and has requested a copy of the official transcript of the House Action on the Florida Resolution including the authority granted to the Board of Trustees.

The Board commended AMA Delegate Dr. Joseph Von Thron for his outstanding leadership regarding this issue and for the eloquent presentation before the House which contributed significantly to the overwhelming adoption of the Florida Resolution, and also all Florida's Delegates and Alternate Delegates for their support and efforts toward passage of the Resolution.

### Council on Legislation

Approved Association policy regarding proposed legislation as follows:

**Nurse Practice Act**
- Actively opposing changes in the Nurse Practice Act as proposed in Senate Bill 1.

**Laetrile**
- Disapproving legislation to legalize the manufacture of Laetrile in Florida.

**Acupuncture**
- Disapproving legislation that would allow for an increase in the number and type of individuals authorized to practice acupuncture.

**Chiropractic**
- Took no position regarding legislation redefining the practice of Chiropractic.

**Patient Compensation Fund**
- Endorsing legislation to reorganize the Patients Compensation Fund Board of Governors.

**State Licensure of Physicians**
- Took no position regarding legislation to change the exemption from state licensure for physicians employed in state institutions from 10% of the number employed in an institution to 10% of the number employed by an agency.

### Council on Medical Systems

**HSA Authority**
Supported efforts during the next Session of the Legislature to assure that the maintenance of authority for health planning remains at the local level with local autonomy.

**Health Planning Consortium**
Agreed to work with the Florida Osteopathic Medical Association, Florida Hospital Association and the Florida Pharmacy Association to develop a unified effort in meeting the challenges of health planning.

**Health Planning Newsletter**
Approved publication of an appropriate Newsletter regarding health planning activities for distribution to the membership.

**Public Health Study**
Requested the Governor to appoint a Blue Ribbon Committee, including practicing physicians, to study public health in Florida, for the purpose of improving public health service delivery and development of proposed legislation for the 1980 Session of the Florida Legislature.

**HSA Training Program**
Requested that the appropriate Department of the AMA be asked to conduct a training program on HSA problems in Florida for physician members of HSA's who express a desire to serve on HSA Boards and Committees.

### Allied Professions

**Physician Extenders** Approved a recommendation to support a revision to the Medical Practice Act that would create a physician extender clause to regulate both advanced nurse practitioners and physicians' assistants similar to the present clause regulating only PA's (458.135) requiring that a physician must obtain a certificate for the extender and may only obtain a certificate for a maximum of two extenders.

### Ad Hoc Committee on Nutrition

**Health Run** Approved FMA sponsorship during the 1979 Annual Meeting of a three mile health run for physicians and their guests. Detailed information will be included in the FMA Annual Meeting Briefs.

### Council on Specialty Medicine

**Specialty Group Criteria** Recommended to the House of Delegates modification to the present requirement in the criteria for recognition of specialty groups by the FMA, "that 100% of eligible, active members must be members of the FMA," to allow for a 10% variation in compliance with this criteria and to establish levels of recognition to allow for a transition period which will enable specialty groups to fully comply with the criteria for full recognition.

**FMA Journal Editor** Unanimously and enthusiastically approved the President-Elect's nomination of Gerold Schiebler, M.D. for re-appointment as Editor of the FMA Journal for 1979-80.

**FMA Garden of Honor** Recommended to the House of Delegates establishment of an FMA Garden of Honor to be located on the FMA property to honor and memorialize in perpetuity certain members of the FMA and others who have made outstanding contributions to the medical profession and to the public.

**Blue Shield** Submitted nominations to Blue Shield for elections to the Blue Shield Board for vacancies occurring in 1979.

### FMA Awards

**Excellence in Medical Journalism** Approved continuance of the FMA Award for Excellence in Medical Journalism to be presented at the 1979 FMA Annual Meeting for excellence in the field of medical reporting.

**A.H. Robins Award** Selected the recipient for the 1979 A.H. Robins Award for community service by a physician to be presented at the House of Delegates in May 1979.

**Certificate of Merit** Selected a physician to be nominated to the House of Delegates as recipient of the Association's highest honor, the Certificate of Merit for 1979.

**Certificate of Appreciation** Selected a physician to be nominated to the House of Delegates as a recipient of the 1979 Certificate of Appreciation.

**Distinguished Layman's Award** Deferred action on selection of the recipient for the 1979 Distinguished Layman's Award for consideration at the April Board Meeting. County medical societies wishing to submit additional nominations for this award should do so at the earliest possible date.

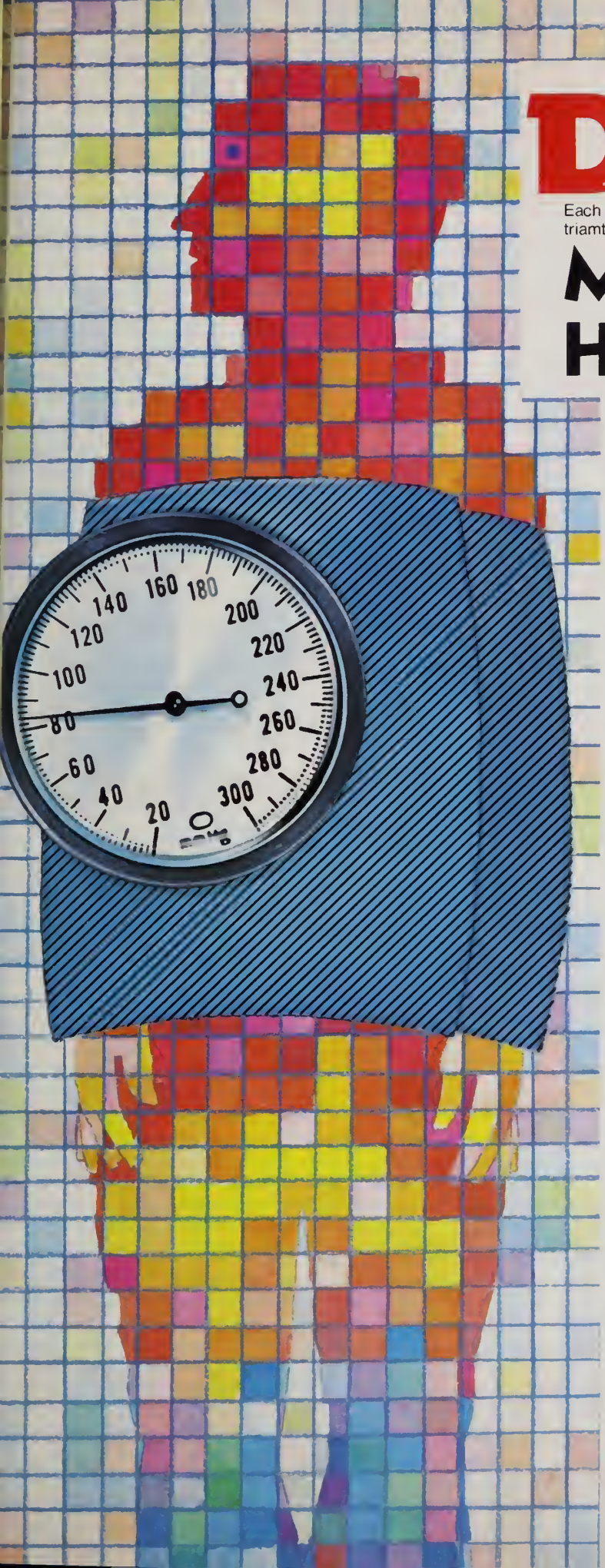
**March Board Meeting Dates** Approved a change in the dates for the March Meeting of the FMA Executive Committee and Board of Governors from March 10-11, 1979, to **April 6-8, 1979**, at the Host Airport Inn, Tampa, Florida.

The board will consider annual reports of FMA Councils and Committees at its April Meeting for submission to the House of Delegates, May 23-27, 1979 at the Diplomat Hotel, Hollywood, Florida.

**International Cuban Medical Association** Approved FMA co-sponsorship of the Fifth Annual Cuban Medical Association Congress to be held at the Americana Hotel, Bal Harbour, Florida, July 3-7, 1979.

**FMA Co-Sponsorship of AMA Seminars** Approved FMA co-sponsorship of the AMA Seminars in 1979, **Medical Staff Leadership, February 9-10, 1979, Doral Country Club and Hotel, Miami,** and **Patients Safety/Risk Control Seminar, November 9-10, 1979 at the Breakers Hotel, Palm Beach, Florida.** For further information, regarding these seminars, contact:

Dept. of Hospitals & Health Facilities
American Medical Association
535 North Dearborn Street
Chicago, Illinois 60610
(312) 751-6656



# Dyazide®

Each capsule contains 50 mg. of Dyrenium® (brand of triamterene) and 25 mg. of hydrochlorothiazide.

# Makes Sense in Hypertension*

**Before prescribing, see complete prescribing information in SK&F Co. literature or *PDR*. A brief summary follows:**

* **Warning**
This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

**Contraindications:** Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

**Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired.** If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K+ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

**Precautions:** Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spironolactone is used concomitantly, determine serum K+ frequently; both can cause K+ retention and elevated serum K+. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine.

**Adverse Reactions:** Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

**Supplied:** Bottles of 100 and 1000 capsules; Single Unit Packages of 100 (intended for institutional use only).

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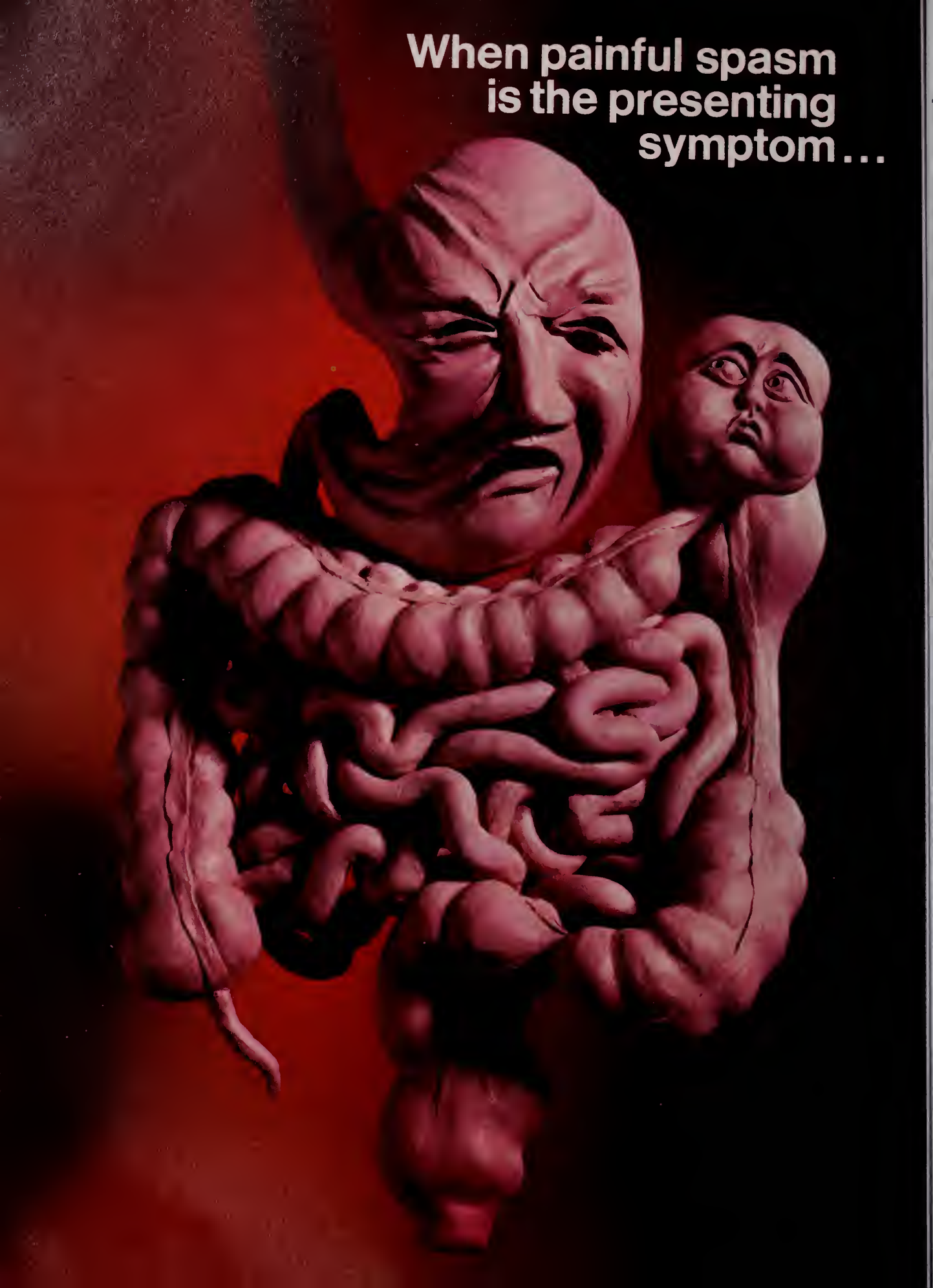

When painful spasm
is the presenting
symptom...

. . . in functional G.I. disorders*

# Bentyl®

## (dicyclomine hydrochloride USP)

10 mg. capsules, 20 mg. tablets,
10 mg./5 ml. syrup, 10 mg./ml. injection

helps control abnormal motor activity
with minimal anticholinergic side effects†

Demonstrated smooth muscle relaxant activity.

In this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

. . . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.

Pylorospasm has almost totally blocked passage of barium meal.

Barium meal beginning to pass 10 minutes after intramuscular injection of 20 mg. Bentyl.

*"The correlation of spasm relief and drug given was excellent."*

*This drug has been classified "probably" effective in treating certain functional G.I. disorders.

†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:
King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

**Merrell**

8-3497 (Y515A)

# Bentyl®

## (dicyclomine hydrochloride USP)

Capsules, Tablets, Syrup, Injection
AVAILABLE ONLY ON PRESCRIPTION.

Brief Summary
INDICATIONS
For use as adjunctive therapy in the treatment of peptic ulcer. IT SHOULD BE NOTED AT THIS POINT IN TIME THAT THERE IS A LACK OF CONCURRENCE AS TO THE VALUE OF ANTICHOLINERGICS/ANTISPASMODICS IN THE TREATMENT OF GASTRIC ULCER. IT HAS NOT BEEN SHOWN CONCLUSIVELY WHETHER ANTICHOLINERGIC/ANTISPASMODIC DRUGS AID IN THE HEALING OF A PEPTIC ULCER, DECREASE THE RATE OF RECURRENCES, OR PREVENT COMPLICATION

Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the following indications as "probably" effective:

May also be useful in the irritable bowel syndrome (irritable colon, spastic colon, mucous colitis, acute enterocolitis, and functional gastrointestinal disorders); and in neurogenic bowel disturbances (including the splenic flexure syndrome and neurogenic colon).

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

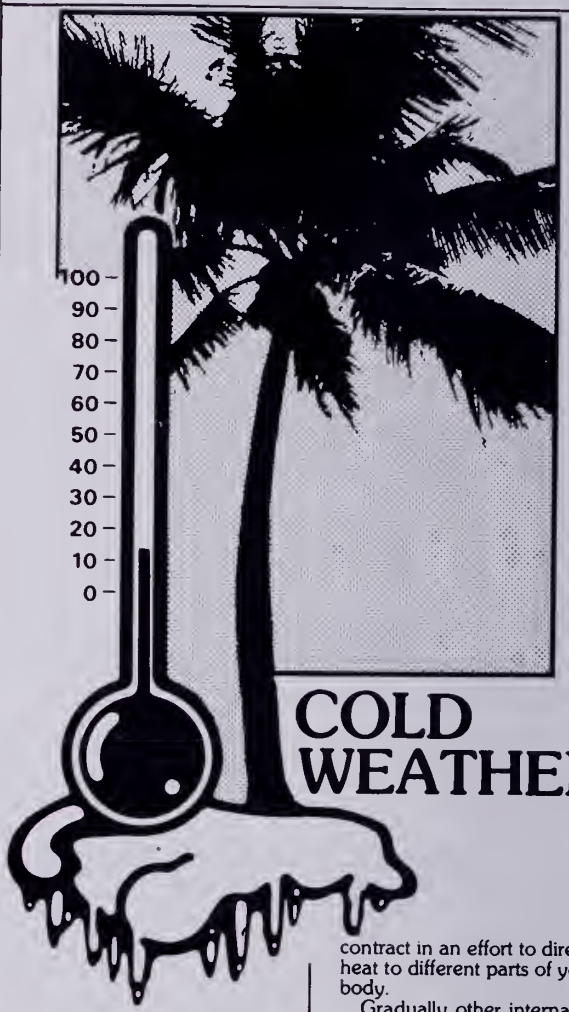
CONTRAINDICATIONS. Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient; unstable cardiovascular status in acute hemorrhage, severe ulcerative colitis; toxic megacolon complicating ulcerative colitis; myasthenia gravis. WARNINGS: In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. PRECAUTIONS: Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with: autonomic neuropathy; hepatic or renal disease; ulcerative colitis—Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon; hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension; hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.
It should be noted that the use of anticholinergic/antispasmodic drugs in the treatment of gastric ulcer may produce a delay in gastric emptying time and may complicate such therapy (antral stasis). Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. ADVERSE REACTIONS: Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention; blurred vision and tachycardia; palpitations; mydriasis; cycloplegia; increased ocular tension, loss of taste; headache, nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. DOSAGE AND ADMINISTRATION: Dosage must be adjusted to individual patient's needs.
*Usual Dosage*: Bentyl 10 mg. capsule and syrup: *Adults*: 1 or 2 capsules or teaspoonfuls syrup three or four times daily. *Children*: 1 capsule or teaspoonful syrup three or four times daily. *Infants*: ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg.: *Adults*: 1 tablet three or four times daily. Bentyl Injection: *Adults*: 2 ml. (20 mg.) every four to six hours intramuscularly only. NOT FOR INTRAVENOUS USE. MANAGEMENT OF OVERDOSE: The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine® (bethanecol chloride USP) should be used.
Product Information as of October, 1976

**Merrell**

MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.


# MEDICAL MESSAGE

from the Florida Doctors




## COLD WEATHER

Floridians often boast that winters in the Sunshine State are among the mildest in the nation. Florida physicians, admit to the warm climate, but urge Floridians to take precautions nonetheless, to avoid becoming victims of cold weather.

Your doctor, through years of training and continuing education, is well versed in the problems caused by cold weather and the best ways of avoiding or treating the problem.

Regardless of the temperature outside, your body has one basic goal - maintaining a constant internal temperature of 98.6 degrees Fahrenheit.

At the first hint of cold your skin may turn white and your feet and hands may feel chilled as blood vessels in your skin contract in an attempt to conserve heat within the body core (a process called vasoconstriction). Later you may shiver as your muscles contract in an effort to direct heat to different parts of your body.

Gradually other internal actions take place, all aimed at preserving body temperature.

Wind, wetness, cool temperatures and overexertion can lead to hypothermia, a sometimes fatal reduction of the body's vital core temperature. Even a minor boating accident can cause disaster. Someone immersed in water 60 degrees in temperature may face death in a short period of time.

When body temperature drops below 95 degrees, the ability to shiver is lost. Further decline in temperature usually results in death.

You needn't stay inside to stay warm, however. Layering clothing is one of the best ways to stay warm, and one of the worst is alcohol, which actually lowers body temperature.

*This is a medical message from the Florida Medical Association in behalf of the doctors of Florida and as a public service feature*

# Special Issue on FMA Programs

## Introduction

## Your FMA

**Robert E. Windom, M.D.**
**Guest Editor**

It would be difficult to state a percentage, but it would be safe to say that a significant majority of Florida physicians know very little about what the FMA accomplishes. How often have you heard a colleague ask you why the FMA doesn't do this or that? Or have you been told that someone would not join the FMA because it doesn't do anything for him? One wonders how many physicians think that the FMA is some ethereal body, or person, that resides in Jacksonville, acting indifferently and authoritatively, totally autonomous, completely lacking physician direction!

Being aware that Florida physicians must know what their representative organization does for them, the editorial staff of your *Journal of the Florida Medical Association* has dedicated this special issue to explain the many and varied activities performed by the FMA. As Guest Editor, even I was amazed at the extent and ramifications of all of its functions. This is the first time such a publication has been presented which covers every aspect of the organizational structure, detailing the work of each committee, council and the Board of Governors. It is readily evident that the FMA is a dynamic organization, acting upon the wisdom of hundreds of fellow physicians who donate thousands of hours of service yearly to benefit all of us in the practice of medicine. This clarifies to the skeptic that actions by the FMA are the result of direction by fellow colleagues who represent every physician in our great State, each one able to provide input from his local county society to the highest level in the State.

It is obvious that the smooth operation of the FMA cannot occur without an efficient staff working fulltime to respond to the needs of Florida physicians. We are most fortunate to have an Executive Vice President whose 30 years of service to our organization has placed him at the top among his peers throughout the country. His management expertise has provided us an insight in leadership that accounts significantly for the FMA being one of the best organizations of its kind anywhere. He has assembled a cadre of individuals whose dedication to serving physicians makes easier the work of any physician who is active in the FMA. To this superb staff each of us owes a great debt of gratitude.

I hope that you will review each article in this issue thoroughly in order to understand the total program. Keep the issue readily available for future reference in order to refresh your memory as to just what is done in specific areas. I believe you will agree with me that each of us should be proud to be a part of such an organization that works constantly on our behalf. I know that if you do your job at whatever level, the FMA will do its job for all of us.

Dr. Windom

**The Author**

*ROBERT E. WINDOM, M.D.*

*Dr. Windom is Secretary of the Florida Medical Association. A graduate of Duke University School of Medicine, he is engaged in the private practice of internal medicine and cardiology in Sarasota, Florida.*

# An Overview of FMA Programs

**Thomas B. Thames, M.D.**

I have been asked to write an article on the "Overview of FMA Programs" with special emphasis on the role of the Board of Governors, Executive Committee and House of Delegates. This article will necessarily draw on my experience in my sixth year as a member of the Board of Governors and my fourth year as a member of the Executive Committee of the Florida Medical Association.

I feel that an understanding of the programs of the FMA would necessitate an understanding of the relationship of the House of Delegates to its Board of Governors and Executive Committee of the Board. I believe we can best understand such a relationship if we consider the Florida Medical Association as a business, corporate structure. Indeed, the FMA is big business with millions of dollars in its budget and thousands of representative doctors as its members or stockholders. Using this corporate image then, the House of Delegates would represent the stockholders of the corporation. All of us are members of the FMA who voluntarily join and pay our dues as licensed physicians in the State of Florida.

## The House of Delegates

Our delegates, who represent us at the annual and special meetings of the Florida Medical Association, act like those stockholders who attend the stockholders' meetings of the corporate world. In the Florida Medical Association, the delegates represent the some 12,000 plus members of the Florida Medical Association as if they were holding the proxies for all. At the present time we have one delegate for each 40 active Florida Medical Association members within the societies and one for each fraction above the units of 40 so that we attempt to have a House that is limited as nearly as possible to some 250 members and the ratio of delegates to the House of one to each 40 members and fraction thereof is reviewed annually by the Board of Governors in an attempt to keep the House at approximately 250 members.

**The Author**

*THOMAS B. THAMES, M.D.*

*Dr. Thames practices family and occupational medicine in Orlando, Florida. He is a member of the FMA Board of Governors and Executive Committee.*

The House of Delegates is the legislative and business body of the Florida Medical Association. Its members are elected from each county medical society on the ratio as noted above and represent not only that county medical society and their own specialty interest but Florida medicine as a whole in determining the programs that will be carried out and the policies that will be adopted by the Florida Medical Association.

These policies and procedures of the House of Delegates are carried out in several ways: 1) By resolutions introduced by individual delegates or county societies or by specialty groups; 2) By reports of FMA officers to the House of Delegates requiring action; and 3) By reports of committee and council chairmen which are considered through the reference committees of the House. These reference committees come back with information and procedures and policies to be voted on by the House; such policies to be later carried out by the Board of Governors and officers of the Florida Medical Association. At each of our annual business meetings, the reference committees are divided into reference committees on 1) health and education; 2) public policy; 3) finance and administration; 4) legislation and miscellaneous; and 5) medical economics.

Each of these reference committees is attended not only by delegates to the House of Delegates but any member of the Florida Medical Association who wishes to be present and to express himself upon any item of business which has been assigned to the appropriate reference committee. After due deliberation by the reference committee, a recommendation is made to the House of Delegates sitting in session and the delegates themselves determine the procedures and policies of the House. This is much the same as in a stockholders' meeting where certain items of business are referred to the stockholders and their vote is binding upon the officers and directors of the corporation for their policies for the coming year.

## House Policies

These policies of the House may be broad in scope, such as the policy of the House adopted several years ago which instructed the officers of the Florida Medical Association not to involve themselves or the FMA directly into PSRO, or they may be very specific as, for

instance, the instructions to the President of the Florida Medical Association to send a letter to President Carter, over the FMA President's signature, concerning his statement of the actions of physicians in organizing into organized medical societies after our recent House meeting.

The House receives literally hundreds of pieces of information and acts on hundreds of pieces of items at each of its annual meetings; some of these items being introduced by the resolutions, some being referred by the officers and Board of Governors. Some of these are received for information only and may be important only in the understanding of each individual delegate and the understanding of our members about different medical procedures and legislative changes which have taken place. Others require direct action and policy for new procedures that may be coming up in the coming year and others are simply expressions of our position on policies which have already taken place on a local, state or national level.

### The Board of Governors

If the House of Delegates represents the stockholders of a corporation, then the Board of Governors of the Florida Medical Association represents the Board of Directors of any large corporation. In the Florida Medical Association, the Board of Governors consists of the President, the President-Elect, Vice President, the Secretary, the Treasurer, the two immediate past Presidents, one of the delegates to the House of Delegates of the American Medical Association, who is appointed by the President, and five members appointed by individual Presidents.

These last five members are four members representing the four districts of the Florida Medical Association on staggered terms, each member being appointed for four years and each district coming up only once in each President's term so that the individual President of the Florida Medical Association will appoint a representative from one district to serve four years. The fifth member is a member appointed at large by the President who can come from any district and serves for a term of one year. All of the above members of the Board of Directors are voting members of the Board of Directors.

Advisory members to the Board of Directors may be selected to serve for one year each by each Board of Directors and, presently, consists of: 1) a representative from the Florida Department of Health and Rehabilitative Services; 2) a representative of the State Board of Medical Examiners; 3) a representative of the Board of Directors of Blue Shield of Florida, Inc.; and 4) the Speaker of the House of Delegates of the FMA; and 5) a representative of the Board of Directors of the Florida Physicians Insurance Reciprocal.

Exactly as is true in the business world, the Board of Governors of the Florida Medical Association has much power and takes many other actions between the annual meetings of the House of Delegates which must be reaffirmed by the House of Delegates at their annual meetings. They are empowered to take any action on behalf of the Association as long as it is not contradictory or contravening an action of the House of Delegates or contrary to the Articles of Incorporation or By-Laws of the Florida Medical Association.

There are many legislative and other programs which require specific action on an immediate basis which have not previously been acted on by the House and these matters are covered by the Board of Governors of the Florida Medical Association at their meetings. They meet at least quarterly on dates announced in advance; they may meet more frequently than that if necessary. They have certain specific actions which are always part of the Board's actions. That is, they must approve an annual operational budget for the Florida Medical Association and review all annual audit reports. They are responsible for all the councils and standing committees of the FMA. They set the dates and approve the programs and schedules of all meetings of the Florida Medical Association and they are responsible for publishing the official *Journal of the Florida Medical Association* and selecting its editor. The Board is also responsible for dividing the state into medical districts—four districts with as equal representation for numbers of physicians as possible. They direct and supervise all activities of the Association pertaining to insurance. They also appoint the historian and are required by the By-Laws to have certain standing committees consisting of the AMA delegates, the Board of Past Presidents, the Allied Health Professions, the Voluntary Health Agencies, and the County Medical Society Presidents.

### Councils

As noted above, all councils report to the Board of Governors through its Executive Committee. You are aware that the FMA, by its By-Laws, has the following councils: 1) judicial; 2) legislation and regulations; 3) medical economics; 4) medical services; 5) medical systems; 6) scientific activities; and 7) specialty medicine.

Multiple items requiring action are referred to the Board of Governors through its councils each year. Some of these are handled by action of the Board of Governors prior to the annual meeting of the House of Delegates and its actions are then considered by the House and affirmed or disapproved. Some of the items considered by the Board of Governors are referred to the council for further study and more information and some of the items are put aside for action by the House of Delegates at its annual meeting.

An example of a program requiring immediate action would be a recommendation by the Legislative Council to support or deny support to a particular piece of legislation so that this decision would have to be made by the Board and carried out prior to the next annual meeting in May, which might come well after the Legislature of the State of Florida had already acted on the item.

An example of a piece of information that might be referred back to a specialty council for further study and information would be referral of whether or not the present fee schedule for Workmen's Compensation is adequate, being referred to the appropriate council and committee of the FMA for further study.

An item which could be presented to the Board of Governors by a council and then referred to the House of Delegates for final decision would be a recommendation by the Council on Medical Services to have a program of CPR in all high schools. This could be deferred to the annual meeting and acted upon by the House of Delegates.

### The Executive Committee

The Executive Committee of the Board of Governors consists primarily of the officers of the Association, that is, the President, President-Elect, Vice President, Secretary, Treasurer, the Immediate Past President, and one optional member of the Board of Governors appointed to the Executive Committee by the President to serve a one-year appointment.

The Executive Committee meets presently at approximately once every two months and at any time as necessary. It can make immediate decisions by meeting more frequently than the Board of Governors and by telephone conferences on matters that must be decided prior to the Board of Governors and its actions, in general, must be reaffirmed at the next Board meeting. It attends to all matters that are referred by the President or the Board of Governors to the Executive Committee and reports all its findings and recommendations to the Board of Governors as a whole.

It also acts as the financial committee of the Board of Governors and any action reported to the Board which requires expenditure of funds must be referred to the Executive Committee. The Executive Committee also acts as the long-range planning committee of the Florida Medical Association and acts as a liaison between the Board of Governors and its councils and committees. It coordinates, directs, supervises all the councils and committees and receives their reports and recommendations to be transmitted to the Board of Governors. In addition, the Executive Committee acts as the liaison and serves in an advisory capacity to the Auxiliary to the FMA.

The President of the Florida Medical Association is the Chairman of the Executive Committee. Much of the information and multitude of items which go to the Board of Governors could not be handled without a smaller group of the Board of Governors having the opportunity to review the material and condense it and give some recommendation and guidance to the Board as a whole. This is meant to be a more efficient way of helping the Board to have the opportunity to spend more time on serious problems and to make reasonable decisions in a shorter period of time. For example, the question of whether candidates for office in the Florida Medical Association should have their names printed and biographical material about the candidates printed in the Florida Medical Association's *Journal* was studied by the Executive Committee. A recommendation was made to the Board of Governors as a whole with the further discussion and final decision having been made by the Board of Governors.

### Other Programs

I hope the above discussion of the interrelationship of the House of Delegates, the Board of Governors, and the Executive Committee, in their relationship to one another and relationship to the officers of the Florida Medical Association will give you a better understanding of how the Florida Medical Association policy and business is carried out. There are other aspects of programs which ought to be mentioned. The Leadership Conference which is generally held near the end of January in a central location in the state is an attempt by the leadership and Board of Governors of the Florida Medical Association to keep the county medical societies through their elected officers, council and other committee chairmen knowledgeable and up to date on problems and policies and legislation which have occurred between the time of the annual meeting and prior to the next annual meeting in an attempt to give people who have shown an interest in working in the Florida Medical Association the opportunity to be exposed to information that may be helpful and encourage them to continue active work in the Florida Medical Association.

On occasions there are special committees which need to be set up. These special committees may be designated as ad hoc committees by the President of the Florida Medical Association at his prerogative or they may be set up by the House of Delegates as, for instance, the Special Committee on Blue Shield which was created by the 1978 House of Delegates after the discussion about whether or not the Florida Medical Association House of Delegates should continue to serve as the House of Delegates of Blue Shield of Florida, Inc. because of problems with Federal interference in the

insurance system. Such a special committee was designated to be set up by the House of Delegates to get further information and report back to the House so that a more reasonable and intelligent decision might be made by the members of the House.

### Summary

Your Florida Medical Association is big business. It has to operate as a big business but its primary purpose always is to keep in mind all of its members' wishes and desires and, to the best of its ability, to meld these wishes and desires into a unified program which will advance better care of medicine for the citizens of the State of Florida and a more coordinated and effective group of physicians to look out for their patients and their own interests in the legislative arena.

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# The Doctor's Resolutions

At the beginning of this New Year I resolve to:
Spend more time reading medical literature,
Spend more time with my family,
Spend more time exercising my body,
Smoke less,
Drink less,
Eat less,
Dedicate myself more fully to my patients and my work,
Give more time to civic and religious affairs,
Donate time and money to those less fortunate,
Do a better job with my own financial affairs,
Attend all my medical staff committees and meetings,
Keep my hair trimmed more often,
Not miss the Medical Society meetings,
Stay better informed of world events,
Get enough relaxation to ease the stress and strain,
And, stop sleeping.

Richard A. Essman, M.D.

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Reprinted from the Editorial section of The Picomeso Mail Bag of the Pinellas County Medical Society, January 1979. Dr. Essman is Editor of The Picomeso Mail Bag and a Consulting Editor of the FMA Journal.

# Florida Medical Association's Affiliated Organizations

W. Harold Parham, D.H.A.

The Florida Medical Association (FMA), as an organization, has been very original and farsighted in its operations and long-range planning.

Scientific activities, public relations, legislation, and so forth, are covered elsewhere in this issue by other authors. This outline is limited to organizations formed, sponsored, or controlled by the FMA and are discussed in chronological order.

### Florida Medical Auxiliary - 1926

The Association assisted with the establishment of the Auxiliary in 1926, and has been a continuous sponsor to the current time. The Executive Committee of the FMA serves as an advisory committee to the Auxiliary and attempts to cooperate in every way possible. The Auxiliary also, along with its many other projects, assists with programs of the FMA. The FMA provides financial assistance to the Auxiliary and also provides an executive staff.

### Blue Shield of Florida, Inc. - 1947

Blue Shield of Florida, Inc. was sponsored by the FMA which assisted with its establishment in 1947. Florida physicians provided the original monies to form the corporation. The House of Delegates serves as the active corporate membership of Blue Shield, and the FMA Board of Governors reviews and approves nominations for election to the Blue Shield Board of Governors by its active membership (House of Delegates).

### FLAMPAC - 1950

The Florida Medical Political Action Committee (FLAMPAC) and its predecessor, the Florida Committee for Better Government, which was established in 1950, were authorized and sponsored by the FMA. The FMA was active in its establishment, appoints its Board of Directors, and provides its executive staff and financial assistance for educational activities. The FMA does not participate in any manner with candidate selection or candidate support.

### Florida Medical Foundation - 1956

The Florida Medical Foundation was authorized, sponsored and established by the FMA in 1956. It was formed to perform functions (as a 501C3 tax-exempt organization) which were not possible by the FMA. The FMA appoints its Board of Directors, provides staff and financial assistance.

### FLAMEDCO - 1972

FLAMEDCO was organized and established by the FMA in 1972 as a stock-for-profit corporation. The FMA selects the directors and owns the stock with the FMF. The FMA also provides the officers and staff for the corporation.

### F. P. I. R. - 1975

The FMA-Professional Liability Insurance Trust was organized in 1975 by the FMA to fill a void and provide professional liability insurance coverage by the private sector. It was succeeded by the Florida Physicians' Insurance Reciprocal. The FMA approves the Board of Directors (advisory committee) and provides the services of its EVP as Attorney-in-Fact for the Company.

### PIMCO - 1975

The Professional Insurance Management Company, the successor to Harlan-Med, Inc. was established by the FMA and serves as the management company for the reciprocal and is a general insurance agency to administer FMA-sponsored insurance programs. The FMA has limited control over the corporation, owns stock with the FMF and provides the Chairman of the Board of Directors (the FMA-EVP) through a contractual relationship.

### FHDC - 1977

The Florida Health Data Corporation was established in 1977 with the co-sponsorship of the FMA which designates four of its Board of Directors, provides partial financial assistance, and provides executive staff.

This, in summary, outlines the organizational relationship. Books could be written on the activities and accomplishments, through the years of these various organizations.

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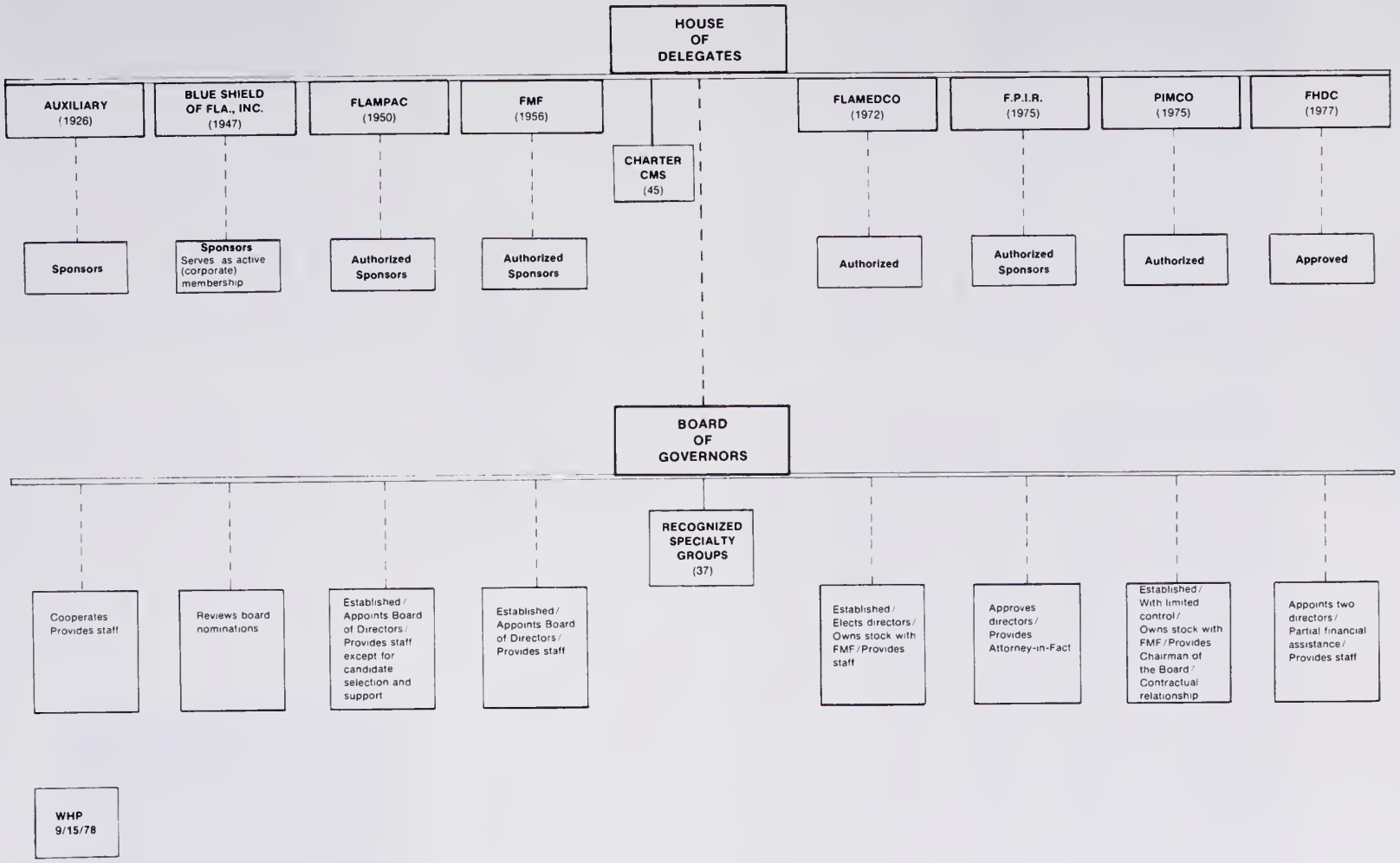
Dr. Parham is Executive Vice President of the Florida Medical Association, Inc.

## FLORIDA MEDICAL ASSOCIATION, INC.



# Know Your Council Chairmen

Since this is a "Special Issue on FMA Programs," it is appropriate to feature seven physicians who preside over seven important program sectors.

These are the chairmen of the Florida Medical Association's seven "councils." In the FMA organizational framework, various committees function under the umbrella of one of the councils which, in turn, report directly to the FMA Board of Governors.

Over a period of years, as the needs and the priorities of the FMA change, so the council structure changes. A council may receive added duties, or some of its responsibilities may be transferred to another council. A council might be discontinued or changed to committee status, or its functions might be merged with another entity. Or a new council might be created.

At the present, the seven FMA councils are: (1) Legislation and Regulations; (2) Scientific Activities; (3) Judicial; (4) Medical Systems; (5) Medical Economics; (6) Medical Services; and (7) Specialty Medicine.

The men who chair the councils have earned their wings through working at various levels of organized medicine. Most have been President of their county medical societies, and one, Scientific Activities' Yank D. Coble Jr., M.D., of Jacksonville, is the incumbent President of the Duval County Medical Society.

They are a relatively young group (average age 48), and surprisingly, not a one is a native Floridian. Two were born in North Carolina, and the others had their beginnings in Iowa, Indiana, Georgia, Connecticut and Missouri.

The seven are graduates of as many medical schools and they include three internists, a family physician, a general surgeon, an orthopedic surgeon and a neurologist.

Three are in their first year of service as a council chairman. Two are veterans of five years in their chairs, and two others have two and four years of service.

**Yank D. Coble Jr., M.D.**
**Jacksonville**
**Council on Scientific Activities**

**Dr. Coble**

Yank D. Coble Jr., M.D., is serving his second year as Chairman of the Council on Scientific Activities.

A native of Burlington, N.C., Dr. Coble received his M.D. Degree in 1962 from Duke Medical School, where he was President of the Student Body and Chairman of the Honor Council. After internship and residency at New York Hospital-Cornell Medical Center, he obtained a Master of Public Health degree at the London School of Tropical Medicine and Hygiene.

Following a fellowship in endocrinology and nutrition at the National Institute of Health, Dr. Coble served for a time on the faculty of the Department of Medicine, Vanderbilt Medical School. Certified in internal medicine and endocrinology, Dr. Coble is in private practice in Jacksonville and serves as Clinical Associate Professor of Medicine, University of Florida College of Medicine.

At the present time, Dr. Coble is President of the Duval County Medical Society and Chairman of the FMA Committee on Nutrition. He is Past President of the Florida Endocrine Society and past Chairman of the Florida Diabetes Advisory Council; former Vice Chairman and Chairman of the FMA Committee on Continuing Medical Education; and former President of the Jacksonville Academy of Medicine.

Active in civic activities, he is President of the Jacksonville Citizens Council.

## James A. Winslow Jr., M.D.
## Tampa
## Judicial Council

Dr. Winslow

James A. Winslow Jr., M.D., is serving his first year as Chairman of the Judicial Council, of which he has been a member since 1971.

Dr. Winslow was born at Cuthbert, Ga., and received B.S. and M.D. degrees from Emory University in Atlanta in 1942 and 1944. He then entered the U.S. Navy for two years, including a one-year internship at the U.S. Navy Hospital in Brooklyn, N.Y.

After naval service, Dr. Winslow took residency training in internal medicine at the Medical College of Georgia. He then entered the private practice of internal medicine and cardiology, taking a 16-month break in the 1950s to return to active duty with the Navy.

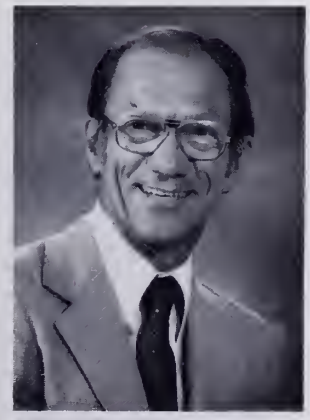
Dr. Winslow is a Fellow of the American College of Physicians and a Diplomate of the American Board of Internal Medicine.

He is a former Secretary and President of the Hillsborough County Medical Association and served as a delegate to the Florida Medical Association for many years.

Dr. Winslow serves as Clinical Associate Professor of Medicine at the University of South Florida College of Medicine.

He is a former Chairman of the Board of the Hillsborough County Heart Association and a member of the Board and Executive Committee of the Florida Heart Association.

## James B. Perry, M.D.
## Fort Lauderdale
## Council on Legislation and Regulations



Dr. Perry

James B. Perry, M.D., of Fort Lauderdale, serves both as Chairman of the Council on Legislation and Regulations and as Vice Speaker of the Florida Medical Association House of Delegates.

Born in Kansas City, Mo., Dr. Perry earned a B.S. degree from Marquette University in 1951, and stayed on to work on his M.D., which he received in 1956. After internship at Mound Park Hospital in St. Petersburg and a two-year tour as a U.S. Air Force medical officer, he entered the private practice of family medicine at Pompano Beach.

In 1964, he closed his practice and entered a neurology residency at the Mayo Graduate School of Medicine, Rochester, Minn. In 1967, he relocated to Fort Lauderdale.

Dr. Perry has served as Secretary-Treasurer and President of the Florida Society of Neurology, and as President of the Broward County Medical Association.

He is a Diplomate of the American Electromyography Society and is a member of the American Medical Associaton, the Southern EEG Society, the American EEG Society and the American Academy of Neurology.

## James L. Borland Jr., M.D.
## Jacksonville
## Council on Medical Systems

Dr. Borland

James L. Borland Jr., M.D., a practicing gastroenterologist, is Chairman of the Council on Medical Systems.

Dr. Borland was born in Durham, N.C., attended the University of Florida, and received his M.D. degree from Johns Hopkins University School of Medicine in 1959. He took residency training in internal medicine at Vanderbilt University and Hopkins, then completed a gastroenterology fellowship at Duke University Medical Center.

He was certified by the American Board of Internal Medicine in 1965. Dr. Borland is serving on the Board of Governors of the American College of Gastroenterology and is presently Treasurer of the American Gastroenterological Association. He is a Past President of the Duval County Medical Society, Past President of the Jacksonville Hospitals Education Program, and a Past President of the Foundation for Medical Care in Duval County.

Other professional memberships include the American College of Physicians, the American Medical Association, the American Society for Gastrointestinal Endoscopy, and the Florida Gastroenterologic Society.

In 1972, he received the "Young Internist of the Year" Award from the American Society of Internal Medicine.

Dr. Borland also has served as President of the Florida Health Data Corporation and as a member of the Board of Directors of Blue Shield of Florida.

## Dick L. Van Eldik, M.D.
## Lake Worth
## Council on Specialty Medicine

Dr. Van Eldik

Dick L. Van Eldik, M.D., of Lake Worth, is serving his first year as Chairman of the Council on Specialty Medicine.

Born in Iowa, Dr. Van Eldik remained there long enough to receive his M.D. degree from the University of Iowa College of Medicine in 1952. He interned at the Indiana University Medical Center. A Diplomate of the American Board of Family Practice, he has practiced at Lake Worth since 1957.

Dr. Van Eldik has served the Palm Beach County Medical Society as its Secretary, President, and Chairman of the Mediation Committee. He was a former Editor of the Bulletin of the Palm Beach County Medical Society.

He is Immediate Past President of the Florida Academy of Family Physicians and currently chairs that organization's Board of Directors.

Other professional activities include serving as President of the Palm Beach County Medical Foundation and as Treasurer of the District 7 Health Systems Agency.

Other memberships include the American Academy of Family Physicians and Alpha Omega Alpha.

## James F. Richards Jr., M.D.
## Orlando
## Council on Medical Economics

Dr. Richards

James F. Richards Jr., M.D., an orthopedic surgeon in Orlando, has chaired the Council on Medical Economics since 1974.

A graduate of the University of North Carolina School of Medicine in 1956, Dr. Richards took residency training in general surgery at Georgia Baptist Hospital, Atlanta; and in orthopedic surgery at Ochsner Foundation Hospital, Charity Hospital and Touro Infirmary, New Orleans.

He is a Diplomate of the American Board of Orthopaedic Surgery and a Fellow of the American Academy of Orthopaedic Surgery.

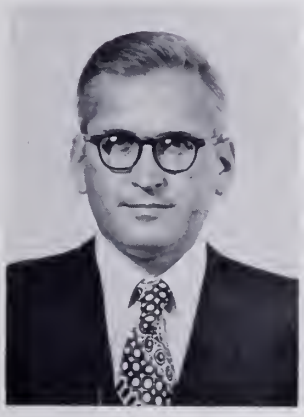
Dr. Richards is a member of the Orange County Medical Society, of which he was President in 1973. He is the incumbent President of the Florida Orthopedic Society.

In the Florida Medical Association, Dr. Richards was a member of the old Committee of 17 and of the Committee on Foundations for Medical Care. He has chaired the Health Insurance Committee and the Committee on the Cost of Medical Care.

Since 1975, Dr. Richards has served as a member of the State Workmen's Compensation Advisory Council.

In 1976-77, he was President of the Orange Memorial Hospital Staff and serves in various capacities at that medical center.

## Joseph T. Ostroski, M.D.
## Miami
## Council on Medical Services



Dr. Ostroski

Joseph T. Ostroski, M.D., practices general surgery and is serving his first year as Chairman of the Council on Medical Services.

Born in New Britain, Conn., Dr. Ostroski attended Tufts College, where he earned a Bachelor of Science degree *magna cum laude* in 1955. After graduation he entered Tufts University School of Medicine, receiving his medical degree in 1959.

He received internship and residency training at Boston City Hospital and had a six-month Lahey Clinic Surgical Fellowship. Twice his graduate medical education was interrupted by service in the U.S. Navy, in which he currently holds the rank of Commander.

Dr. Ostroski has had research experience in the Harvard Sears Research Laboratory and was a teaching fellow at Harvard Medical School in 1966-67.

His professional memberships include the Aerospace Medical Association and fellowship in the American College of Surgeons.

# The Judicial Council

James A. Winslow Jr., M.D.

Questions of law and legality are usually clean-cut and understandable. Matters of professional ethics may occupy a "gray zone" to the point of requiring a judgment call. The quality practice of the art and science of medicine has as its bedrock foundation the wide acceptance of medical ethics by patients and physicians alike. Should this mutual trust deteriorate, chaos would result.

Ethical standards of professional conduct often exceed, but are never less, than those required by law.

Your Judicial Council is not a judge and jury type of legal body. Rather, the Council serves to interpret the AMA Principles of Medical Ethics, the FMA By-laws, and the amendments and regulations which have been set down by the annual meetings of the FMA House of Delegates; and apply these interpretations to the resolution of everyday problems arising in the practice of medicine.

Practically every member of the Florida Medical Association, at one time or another, has questions relative to the professional ethics of a certain situation. While each of us is cognizant of the basic elements of the Principles of Medical Ethics of the American Medical Association and the Florida Medical Association, these broad based guides do not answer the day to day questions that arise in the delivery of medical care. It is therefore the function of the FMA Judicial Council to direct and supervise the activities of the Association which pertain to questions of medical ethics. Additionally, the Council, through standing grievance committees of component county medical societies, supervises the issues that arise out of dissension and disputes among the membership and provides a vehicle for the investigation and adjudication of complaints by patients against members of the Association. With an Association having a membership of over 11,000, it is understandable that the scope and responsibility of this Council is immense.

**The Author**

*JAMES A. WINSLOW JR., M.D.*

*Dr. Winslow is a cardiologist in private practice in Tampa, Florida. A former President of the Hillsborough County Medical Association, he is Chairman of the Judicial Council, on which he has served for almost eight years.*

### Board of Medical Examiners

Another important function of the Judicial Council is its role as organized medicine's liaison with the State Board of Medical Examiners. In this role the Council attempts to provide the Board with necessary assistance in connection with licensure policies and disciplinary procedures. In not every situation that is presented to either the Judicial Council or the Board of Medical Examiners is it easily ascertainable as to whether the question is one that properly should be addressed by organized medicine, or by the Board of Medical Examiners. Through the liaison established with the Board we are able to make early determinations on these questions so that the proper vehicle is utilized in resolving a particular problem.

### Patient Grievances

In its role as the supervisor of the patient grievance system, the Judicial Council refers a complaint when received to the appropriate component county medical society for initial review and consideration. Under Council procedures, the local society is given 180 days in which to assess and investigate the situation and arrive at a final conclusion. If, for some reason, the matter is not adjudicated expeditiously or satisfactorily, the matter can be assumed by the Judicial Council and handled directly. Because of the excellent manner in which our component county medical society grievance committees function, this has seldom been done. In addition, the Council hears appeals from those dissatisfied with county medical society decisions.

It is recognized, however, in certain situations, particularly in the smaller component county medical societies where it is difficult for any member to maintain a posture of impartiality to a given issue, that one of the 15 District Membership and Discipline Committees may be better suited to conduct an investigation and render a finding. With the assistance of this 60-member Committee (one in each district), the Judicial Council, consisting of five members, provides the Association with interpretation of fundamental ethical principles that assist our membership in fulfilling their professional responsibilities.

## The Judicial Council

**James A. Winslow Jr., M.D.**
**Chairman**

(See "Know Your Council Chairmen," Page 184)

* * *

**Vincent P. Corso, M.D.**
**Vice Chairman**

Dr. Corso has been a member of the Judicial Council since 1971 and served as its Chairman in the early 1970s.

The Dayton, Ohio, native attended the University of Florida and received his M.D. degree in 1944 from Tulane University. He is now engaged in the practice of family medicine in Miami, Florida.

Dr. Corso is a former President of the Dade County Medical Association and is at present an Alternate Delegate to the American Medical Association.

* * *

**O. Frank Agee, M.D.**

A native of Johnson City, Tenn., Dr. Agee is in his first year on the FMA Judicial Council. He is a graduate of the Louisiana State University School of Medicine, and is a Professor of Radiology at the University of Florida College of Medicine.

He formerly served as a member of the AMA Committee on Quackery and as Chairman of the FMA Subcommittee on Quackery. He is a Past President of the Alachua County Medical Society and has been a member of the FMA Council on Scientific Activities for the past two years.

* * *

**Joseph H. Davis, M.D.**

Dr. Davis is a native of Flushing, N.Y., and received his M.D. degree from Long Island College of Medicine in 1949.

He has served as Dade County Medical Examiner in Miami for many years and holds the faculty appointment of Professor of Legal Medicine at the University of Miami School of Medicine.

Dr. Davis has been active in many medical groups, including the National Medical Examiners Association, which he once served as President.

* * *

**Robert J. Brennan, M.D.**

Dr. Brennan was born in Chicago and attended the University of Illinois College of Medicine, graduating in 1942. He practices allergy in Fort Lauderdale.

In 1973-74, Dr. Brennan served as President of the American Association for Clinical Immunology and Allergy. For several years he represented the Section on Allergy in the AMA House of Delegates

* * *

**Ray E. Murphy Jr., M.D.**
**Chairman, Membership and Discipline Committee**

Dr. Murphy was born in Lexington, Ky., and received his M.D. degree from the University of Louisville in 1952. He is a general surgeon in Pompano Beach.

He is a former Vice President of FMA and President of the Broward County Medical Association.

## County Society Responsibility

The county medical society has the primary responsibility for the discipline or censorship of its members. Ideally, the Judicial Council should function as an appellate body in such matters. However, in cases in which the local society refuses or otherwise fails to investigate and act on charges against a member, the Judicial Council can and must act. Each society must choose its own methods and penalties for erring physicians. Penalties might range from mild letters of reprimand to suspension or dismissal from the society. District members of the Membership and Discipline Committee are always available for consultation on disciplinary matters.

The importance of the existence of an effective, impartial grievance committee within each and every county medical society can not be over emphasized. The purposes of grievance committees are to prevent or resolve misunderstandings and clarify and adjust differences between patient and physician, and assist in maintaining the high standards of professional conduct. Grievance committees in county medical societies render a valuable service to the public, but this service cannot succeed unless the public knows of its existence. The availability of the local society grievance committee should be publicized through the various channels of public information to the extent deemed necessary by each local society. The membership should certainly also be kept informed of the committee's activity.

## Dissension Among Members

In the 1978 Annual Report of the Judicial Council, the Council's activities were summarized to the House of Delegates at its Annual Meeting in May of 1978. In that report the Council reviewed what it considered one of the greatest and most compelling matters that has come within jurisdiction of the Council. This, of course, is dissension among members in our component medical societies. During the last two years the Council has become increasingly concerned about the time and energy that is being expended by certain of our county medical societies and the Council over matters of internal strife and bickering. Because of its role as the ultimate arbitrator of these kinds of issues, the Council was of the feeling, and continues to feel, that where such a problem exists it should be laid to rest and that the membership of the Association must join together to address the many threatening and pervasive issues that are facing the private practice of medicine. The Council is extremely cognizant of the fact that through its efforts it must continue to define and clarify the standards by which our membership will fulfill its responsibility to the public.

Each physician must, however, find within his own conscience the measure which he will use to test the extent to which his individual conduct is analyzed. Certainly the loss of respect and confidence of our patients because we do not meet the highest standards of ethical conduct is the ultimate sanction we face. Accordingly, the Judicial Council, within the framework of the Principles of Medical Ethics, will continue to shape the ethical relationships, which will be ever changing as our relationships with society dictate.

### Dedicated Physicians

The Council has had a proud tradition established by numerous dedicated physicians who have served throughout the years. Much time and effort has been expended by former Council Chairman John Cheleden, M.D. and William W. Thompson, M.D. The Council presently consists of James A. Winslow Jr., M.D., Chairman, of Tampa; Vincent P. Corso, M.D., Vice-Chairman, of Miami; Joseph Davis, M.D., of Miami; Robert Brennan, M.D. of Ft. Lauderdale, and O. Frank Agee, M.D., of Gainesville. Dr. Agee and Dr. Brennan are new members of the Council who have replaced Dr. Cheleden and Dr. Thompson. The Chairman of the Council's Membership and Discipline Committee for 1978 is R. E. Murphy Jr., M.D., of Pompano Beach.

Any questions concerning the Council's activities or its jurisdiction should be directed to the Florida Medical Association's office in Jacksonville.

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# Duval CMS Drug Restriction Program Endorsed by Medical Board

**(Editor's Note: The following memorandum was sent to FMA Component Medical Societies by George S. Palmer, M.D., Executive Director of the Florida State Board of Medical Examiners , who asked that it be published in *The Journal*):**

The Members of the Board of Medical Examiners are greatly concerned over the enormous numbers of amphetamines and methaqualone being prescribed by physicians and dispensed in pharmacies throughout Florida.

At the Board's meeting in Jacksonville on October 21 and 22, 1978, I was directed to send a memo to each county medical society urging that each society adopt a policy statement and program regarding the use of amphetamines and methaqualone such as that now in effect by the Duval County Medical Society. (See "A Simple Solution to 'Legitimate Prescribing' of Street Drugs," by Guy T. Selander, M.D., JFMA, June 1978, pp. 439-440).

The Members of the Board of Medical Examiners strongly feel that the adoption and implementation of such a program will have the tremendous impact in reducing or even eliminating the improper diversion of amphetamines and methaqualone through "legal prescribing and dispensing channels."

Adopting and implementing such a voluntary program is definitely in the public interest and for the protection of the health of the citizens of Florida. It will certainly reflect favorably upon organized medicine and pharmacy in Florida and greatly aid the Board of Medical Examiners in its role in protecting the health and well being of our citizens.

# The Council on Legislation and Regulations

James B. Perry, M.D., Louis C. Murray, M.D., and David C. Lane, M.D.

A Council of the Florida Medical Association is only as effective as its members make it. Fortunately for the Council on Legislation and Regulations, there has been a willingness and ability to function often under pressing circumstances and at times in adversity.

Perhaps the Council's role in the FMA program can best be understood if we were to begin with some of the philosophy and thinking that enter into decision making. This is best exemplified by the philosophy, "Do unto others as you would have them do unto you." Perhaps, "Love thy neighbor as thyself," is another way of saying it. The actions of the Council embody the thought that correct analysis of a subject is without regard to its merits, but the feeling that it is morally right, and is compatible with the natural law.

There have been many problems facing Florida medicine in recent years and it is the interpretation of the above concepts that has enabled us to work out the solutions we hope are compatible with our lives, our morals, and our profession.

One might ask from where do Council members come and how do they get where they are. Members of the Council and the Council's component committees are appointed by the President of FMA. Often they may have indicated to an FMA officer or member of the Board of Governors that they are interested in working in the legislative area. As in the case of other councils and committees, service on the Council on Legislation and Regulations may, and often does, preempt leisure time and entail personal expenditure and occasional hardship.

Two committees—State Legislation and National Legislation—comprise the Council.

**The Authors**

*JAMES B. PERRY, M.D.*
*Dr. Perry, a practicing neurologist in Fort Lauderdale, is Chairman of the FMA Council on Legislation and Regulations.*
*LOUIS C. MURRAY, M.D.*
*Dr. Murray practices family medicine in Orlando. He is Immediate Past President of FMA, Vice Chairman of the Council on Legislation and Regulations, and Chairman of the Committee on National Legislation.*
*DAVID C. LANE, M.D.*
*Dr. Lane is a neurosurgeon in Fort Lauderdale. He is Chairman of the Committee on State Legislation and a former member of the Florida Senate.*

### Committee on State Legislation

Of the two committees, the Committee on State Legislation is probably the most visible to Florida physicians. With the responsibility for implementing FMA's state legislative program, the Committee meets four or five times a year and occasionally, telephone conferences.

One of the most valuable resources available to the Committee is FMA's "key contact physician" program under which one physician is assigned to each legislator. Usually, the key contact is from the legislator's home area. Through these personal contacts, we achieve our greatest impact upon the legislative process.

By the establishment of field offices in Miami and Tampa in addition to the Capital Office in Tallahassee and the Headquarters Office in Jacksonville, the FMA has developed the capability to keep key contact physicians thoroughly informed as issues move through the legislative process.

The field offices also serve as a conduit for maintaining close contact with the FMA Auxiliary, which has been of great assistance in assuring that information gets out and the necessary contacts are made.

### Legislative Priorities

Many months before the Florida Legislature convenes in April, priorities are established. These usually originate in the Board of Governors based on policy actions of the House of Delegates, and input from specialty groups, FMA committees or individual members. Tags such as "sponsor", "support", "endorse", "oppose", and "no position" indicate the official FMA position on individual legislative items.

The Committee and FMA staff must monitor literally hundreds of bills each year that are in some way related to health care. In 1978, for example, 383 bills were followed, including 160 considered to be of particular importance to medicine.

Many of these bills obviously represent the legislators' and staffs' interpretations of the needs of their constituents. Thus, if one man introduces 15 bills into the legislative maelstrom, all dealing with one health care subject, it must be assumed there is a need. Many of

these bills have a direct effect on older citizens on fixed incomes. The bills obviously are responses to the problems of the people who elect the sponsoring legislator, and these problems must be addressed.

Hence, our responsibility often is to influence the response by means of amendments or substitute legislation. A positive alternative is normally preferable to outright opposition.

### Legislative Process

The Committee on State Legislation keeps close watch on bills in which it is interested from the time they are filed to the time they are passed or rejected on the floor, if they get that far. When public interest in a particular issue is high, hearings may be conducted at various locations in the State, and representatives of the FMA must adequately prepare themselves to represent member physicians at these proceedings.

Later, subcommittee hearings occur. The future of legislation often is decided at this level, and it is obvious that our position must be made known to all involved in the fashioning of that decision.

After hearings, a piece of legislation often is rewritten by the legislative committee staff and resubmitted as a "committee bill" or "temporarily passed." At this stage, a bill must once again be scrutinized carefully. The mere rephrasing of a sentence can and has changed the entire nature of a bill. It is at this point that our legal counsel is of inestimable value.

It is also important that other legislation seemingly unconcerned with medicine is carefully watched to be sure there is nothing harmful to our interest included or amended to that legislation.

If an acceptable result is not achieved in committee, the battle must be carried to the floor of the House or the Senate, or both. If legislation reaches that stage, amendment is much more difficult to achieve.

### The Staff

Day-to-day lobbying is in the capable hands of Mr. Donald S. (Scotty) Fraser, FMA Director of Legislative Affairs; and Mr. George S. Palmer Jr., Manager of the Capital Office. Their efforts cannot be discounted.

They, along with Legislative Analyst Nancy Moreau, attorneys John Thrasher and John French, and the entire secretarial and clerical staff, have done more for the physicians of Florida than can be described in a few lines. They are to be highly commended.

### Doctor of the Day Program

For several years, the FMA has sponsored a "Doctor of the Day" program during sessions of the Legislature. Individual physicians go to Tallahassee and spend a day at the Capitol, where they treat a variety of ailments presented by legislators and members of their staffs. The program not only provides a valuable service to the lawmakers and their employees, but gives physicians a chance to gain a first hand knowledge of state government in action.

This experience results in a citizen-doctor who is more active and involved in the governmental process. Both the FMA and the Legislature are grateful to those of our colleagues who spend many valuable hours away from their practices to provide this service to the Legislature.

### Committee on National Legislation

The Committee on National Legislation is not often in the limelight, but nevertheless, it is one of FMA's most important committees. It consists of a key contact physician for each of Florida's two U.S. Senators and 15 Representatives.

The Committee works with the AMA Washington Office in bringing issues to the attention of Florida's Congressional Delegation. During the past two years numerous visits have been made to Washington for personal discussions at that level, and each Congressman is asked to meet with local and state medical society leaders on his visits to the State.

The major successful efforts of the Committee on National Legislation have been in influencing action on the proposals to place a "cap" on hospital expenditures and the legislation that would mandate a certificate of need for purchase of physicians' office equipment.

This is a result of the contact physicians for our Senate and House members who serve on key committees of Congress. The contact physicians have been ably assisted by contacts from county medical society officers and executives.

You can see from the above, that the programs and plans of the Council are diverse in nature and hopefully effective in solving the problems that face our Association today.

Additional suggestions, plans, and input from members of the Florida Medical Association are desired, encouraged and welcomed. We await your response.

# The Council on Medical Economics

James F. Richards Jr., M.D.

The Florida Medical Association, through its Council on Medical Economics, historically has addressed the problems of the cost of medical care and the availability of health care to the citizens of Florida. Over the years, this has resulted in the Council's involvement in health insurance matters, Relative Value Studies (RVS), and in Workmen's Compensation. It has also required dialogue with committees of the Florida Legislature in regard to pending legislation.

The author has had the privilege of serving as Chairman of the Council under five FMA presidents, beginning with Thad Moseley, M.D., of Jacksonville, in 1974-75. Prior to that time, FMA had a Committee on Advisory to Blue Shield and Fiscal Intermediaries, better known in FMA circles as The Committee of 17 because it had 17 members.

That Committee, under the leadership of Ray Fitzpatrick, M.D., addressed many problems of doctors and patients relating to health insurance. These problems, of course, were increased significantly when Blue Shield of Florida, at the request of FMA, undertook the onerous role of fiscal intermediary for the Medicare Program. During Dr. Moseley's administration, the Committee of 17 was eliminated, and its duties were transferred to the Health Insurance Committee of the Council on Medical Economics. The latter group, currently chaired by B. Philip Cotton, M.D., of Panama City, has worked on various problems, and is now considering the matter of second opinion programs which have been proliferating in recent months.

Meanwhile, Blue Cross and Blue Shield have been kind enough to invite the Chairman of the Council on Medical Economics to its informational meetings, where he is afforded the privilege of the floor.

### Committee on Relative Value Studies

Another of the committees of the Council is concerned with Relative Value Studies. Over the years, this committee has been chaired by Fred A. Butler, M.D., and Charles K. Donegan, M.D., and at the present time by Joel Mattison, M.D., of Tampa. In the mid-1970s, the RVS Committee, assisted by FMA staff and hired statisticians, undertook the enormous task of querying every FMA member for information upon which to base the 1975 Florida Relative Value Studies. Other such studies had been done for the most part arbitrarily by large committees.

Thousands of items of data went into the 1975 Florida RVS, which contained 1,600 new descriptors and which was distributed to all FMA members. Some adjustments, corrections and additions have been made since publication.

It is to be emphasized that the RVS is not a fee schedule, but exactly what the name implies: a study of relative values. It is not until a conversion factor is applied by physicians' offices for the sections of Medicine, Surgery, Radiology, Pathology and Anesthesiology that dollar amounts emerge. Individual physicians develop these conversion factors based upon their own individual usual and customary charges. It is not intended that the individual doctor's conversion factor be made common knowledge in the medical community.

Such studies give medical peer review committees and third parties an easy handle on identifying those physicians who wish to charge in excess of the usual and customary charges in a community. Perhaps of equal importance is the descriptor and code system used in RVS. The five-digit code and the expanded descriptors give all of medicine and the third party carriers a common language. The use of five digits permits expansion and creation of new descriptors as additional procedures are developed.

Nevertheless, the RVSs of three national specialty groups plus the California RVS have been under attack by the Federal Trade Commission.

This year, Dr. Mattison and his Committee have handled all questions and complaints effectively. Disposition was made of problems arising from duplicate codes and descriptors, thereby making the 1975 Florida RVS consistent with the AMA's Current Procedural Terminology, Fourth Edition (CPT4).

### Legislative Testimony

In recent years it has often been necessary for representatives of the Council to testify before legislative

**The Author**

*JAMES F. RICHARDS JR., M.D.*

*Dr. Richards practices orthopedic surgery in Orlando, Florida. He is Chairman of the FMA Council on Medical Economics.*

committees. Appearances have been made before the Health and Rehabilitative Services Committees of both the State and the House in opposition to cost containment legislation.

Worthy of note was the FMA battle with the Cost Containment Act of 1975, in which our forces were joined by those of the Florida Hospital Association and the nursing home industry. Had it passed, that bill would have created a state commission vested with responsibility for prospectively setting rates for all private hospitals and nursing homes in Florida. Initially, the commission would not have included representatives of organized medicine, the hospital industry or nursing home industry. While this omission was corrected, the bill still would have made a mockery of governing boards that have responsibility for operating their institutions.

The Cost Containment Act of 1975 was defeated, but it is anticipated that its ghost will arise annually, as it has done, to require our attention and concern.

### Workmen's Compensation

One series of events worthy of note concerned medical and surgical fees under the Workmen's Compensation program. On April 9, 1975, FMA petitioned the Florida Bureau of Workmen's Compensation for an updating of the medical and surgical fee schedule to comply with law which states that fees shall be "limited to such charges as prevail in the same community for similar treatment of injured persons of like standard of living."

FMA was surprised and chagrined when, after presenting overwhelming evidence to support increases at two public hearings, the petition was rejected. However, the case was given a third and final hearing on December 18, 1975, after which an increase of 32% was awarded based primarily upon the increase in the medical care component of the Consumer Price Index since April 19, 1971, the date of the most recent prior petition.

Despite the increase, many inequities remained. The Bureau of Workmen's Compensation would not recognize anything more than a brief initial office visit and hospital visit, which FMA felt was prejudicial against family practitioners and internists. Furthermore, increases sought for anesthesiology and surgery were only partially obtained. At that time it was hoped that FMA representation on the Statutory Advisory Council to Workmen's Compensation could accomplish adjustment of inequities and annual updating of the fee schedule without the cost and inconvenience of petitions and hearings. It was also hoped that the Bureau would eventually convert to a five-digit code and maintain data on usual and customary charges.

The Chairman of the Council on Medical Economics has served on the Advisory Council, which has endorsed at least three levels of hospital and office visits. The wisdom of a five-digit-code also has been recognized, and at the request of the Bureau, the Chairman of the Council, with help from the Blue Shield staff, completely converted the four-digit Workmen's Compensation fee schedule code to the five-digit system.

Last year, the Bureau began to use and recognize both the four- and five-digit codes and will eventually use the five-digit system exclusively. Since the Department of Health and Rehabilitative Services also is converting to five digits, every state agency in Florida eventually will be using the same system.

### Usual and Customary

The Bureau will be asking physicians doing Workmen's Compensation work to include their usual and customary fees on the Workmen's Compensation form in addition to the appropriate fees from the fee schedule. It is hoped that through this procedure the Bureau will recognize how much lower its allowable fees are compared with usual and customary charges. The FMA House of Delegates, in 1978, adopted a resolution stating that the FMA expects the Bureau to update the fee schedule within a reasonable period of time.

### Advisory Council

The Workmen's Compensation Advisory Council is composed of four representatives each from physicians, industry, insurance carriers, labor, and the legal profession. The author has worked for several years now with the Advisory Council and can say the members are fair-minded men and women who recognize the many problems in the program. They have given a great deal of thought not only to physicians' fees but also to attorneys' fees, the system of disability rating, judges of the Industrial Claims Court, the system of washouts (settlements); and they have spent time pondering possible legislative solutions.

Their overriding interest is quality care at reasonable cost for the injured workman.

### Department of Health & Rehabilitative Services

The Council on Medical Economics has repeatedly called the attention of the Florida Department of Health and Rehabilitative Services to the woefully low fees it pays under its medical programs. The Department has been asked to update its descriptors and adopt the current Florida RVS.

Last year, Vocational Rehabilitation and Children's Medical Services expressed interest in using the RVS. The Department hopes to upgrade all of its data gathering systems by the end of the current fiscal year.

Vocational Rehabilitation will not be able to use the five-digit system as far as data gathering is concerned. However, in order to use the more current coding and

descriptors of the 1975 RVS, the agency will accept the five-digit codes from providers, dropping the last digit when inputting into its data system. This will mean that data gathering will lump together certain procedures, but we will have the advantage of physicians being able to use the five-digit code.

### JFMA Medical Economics Page

Editor Gerold L. Schiebler, M.D., has made available space for a Medical Economics Page in *The Journal of the Florida Medical Association.*

Articles are reviewed and submitted by the Council on Medical Economics. A number of articles have been published so far, sometimes by non-physician guest authors. It is hoped that these articles are interesting and useful to FMA members.

### Cost of Medical Care

In 1975-76, FMA President Vernon B. Astler, M.D., appointed a Cost of Medical Care Committee chaired by the Chairman of the Council on Medical Economics. The Committee had input from the Blues, commercial carriers, hospital administrators and the Florida Hospital Association, as well as physicians.

The Committee undertook to identify those areas in which organized medicine might be able to reduce the cost of care. It recognized that the main source of control by physicians is the hospital order page.

Likewise, the hospital administrators identified areas in which they could control cost.

Some of the Committee's actions were:

—Encouraging physicians to acquaint themselves with the cost of medical care, including laboratory work.

—Encouraging hospitals to eliminate standing orders that might result in unnecessary tests on some individuals.

—Asking hospitals to post the charges for the most common laboratory tests in conspicuous places.

—Asking certain hospitals to include a cumulative cost accounting on the computer printout of patients' laboratory reports.

The Committee attempted to undertake a study of one hospital in West Florida to see if the cost of patient care in two departments could be shown to be reduced in one six-month period compared with another after an educational program. It was extremely difficult to demonstrate any positive results to such attempts, but we are firmly convinced that if we, as a profession, have any control over the voluntary decrease in the cost of medical care, it is in the area of reduced utilization.

The Committee was abolished early in 1978, and at virtually the same time a broader-based Florida Committee on Cost of Medical Care was formed. Organizations and groups in addition to FMA that are represented include the Florida Hospital Association, Blue Cross, and Blue Shield, the Health Insurance Council and the Florida League of Hospitals. Industrial, labor and senior citizen groups were invited to join, but they declined.

Meeting more than a half-dozen times since its formation, the Committee is chaired by Mr. Sal Mudano of Hollywood, Fla., a hospital administrator. Other officers are: Ms. Betty Gurney of the Prudential Insurance Co., Jacksonville, Vice-Chairman; and J. Champneys Taylor, M.D. of Jacksonville, representing Blue Shield, Secretary.

The Committee has identified public education as one of its most important tasks; and plans are being made for meetings throughout the State to which public and business leaders will be invited.

Also, the Committee has voted to launch a professional cost awareness educational campaign at the hospital medical staff level. Individuals or teams will visit the staffs of Florida's largest hospitals at first and, eventually, it is planned that all hospitals be visited.

### The Council on Medical Economics

**James F. Richards Jr., M.D.**
**Chairman**

(See "Know Your Council Chairmen," Page 184)

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**Jack S. Cooper, M.D.**
**Vice-Chairman**

Dr. Cooper is an orthopedic surgeon in Miami and serves as Vice-Chairman of the Council on Medical Economics for Workmen's Compensation.

He was born in Appalachia, Va., and received his M.D. degree from the University of Virginia School of Medicine in Charlottesville.

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**B. Philip Cotton, M.D.**
**Chairman**
**Committee on Health Insurance**

B. Philip Cotton, M.D., serves as Chairman of the Committee on Health Insurance.

He is a native of Panama City, Fla., and returned there to practice otolaryngology after graduation from the University of Miami School of Medicine in 1961 and subsequent service in the U.S. Army.

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**Joel W. L. Mattison, M.D.**
**Chairman**
**Committee on Relative Value Studies and Fee Schedules**

Dr. Mattison was born in Arcadia, Fla., and now practices plastic and reconstructive surgery in Tampa. He earned a B.A. degree from Davidson College and a Bachelor of Divinity from Princeton Seminary before entering Duke University School of Medicine, from which he graduated in 1960.

He is President of the Hillsborough County Medical Association.

# The Council on Medical Services

**Joseph T. Ostroski, M.D.**

FMA's charge to the Council on Medical Services is to evaluate medical services in Florida and to recommend methods of improvement. Other responsibilities include:

—Maintaining liaison with state, public and environmental health agencies.

—Keeping abreast of development in medical telecommunications.

—Formulating methods of providing and delivering rural health care.

—Representing FMA on the School Health Medical Advisory Committee, the Department of Education and Florida's Health Program Office.

—Directing special emphasis on improving emergency medical services.

—Informing the public and medical profession about the problem of drug abuse and developing methods of combating the problem.

The Council's program is carried out through six committees, whose chairmen, along with the Council Chairman, make up the Council membership.

### Committee on Emergency Medical Services And Medical Telecommunications

The FMA Board of Governors has continued to assign high priority to the subject of emergency medical services. Chaired by Roy M. Baker, M.D., of Jacksonville, the Committee on Emergency Medical Services and Medical Telecommunications has sponsored statewide conferences on "The Identification of Needs and Standards for In-hospital Critical Care" (1976), and "EMS Medical Director" (1978).

The Committee has played an important role in the development and passage of landmark state EMS legislation; and at the present time it is surveying the availability of emergency, critical care and other highly specialized facilities and services in Florida.

A separate article on emergency medical services appears elsewhere in this issue of *The Journal.*

**The Author**

*JOSEPH T. OSTROSKI, M.D.*

*Dr. Ostroski is a general surgeon in Miami, Florida. He is Chairman of the FMA Council on Medical Services.*

### Committee on School Health

Edward W. Stoner, M.D., of Oviedo, heads the Committee on School Health, which is responsible for child and school health programs. For 20 years, this Committee has served as the official state school health medical advisory committee to the State Department of Education and the State Health Program Office.

Ex-officio members of the advisory committee include representatives of the Florida Pediatric Society, Florida Dental Association, Florida Academy of Family Physicians, Florida Association of County Health Officers, Florida Association of County School Superintendents, and the Florida Medical Association Auxiliary.

The Committee has co-sponsored several statewide conferences on school health and has continued to monitor the activities and development of the state comprehensive health education program.

A current project is the development of a "flip-chart" for treating emergencies in schools. The state school health policy index, a compendium of school health policies and concepts recommended by the advisory committee since 1958, is being updated.

### Committee on Public Health

The Committee on Public Health is chaired by Clarence L. Brumback, M.D., of West Palm Beach. This Committee has tackled a broad variety of subjects affecting health and environment.

Last year the Committee made recommendations on chlorination of water supplies, unpasteurized milk, and home health care agencies. Recent activities include support for the national immunization initiative and input into the state health plan. The Committee published in the October 1978 issue of *The Journal* an article addressing the need for a separate State Department of Health. Currently, the Committee is reviewing proposed state health legislation; monitoring the implementation of health legislation passed in 1978; and looking into the controversy over the delivery of medical care in local jails and state prisons.

## Committee on Drug Abuse

For several years, the FMA Committee on Drug Abuse was the only organized professional group in Florida working on the various problems of drug abuse. In 1975 and 1976, the Committee, now chaired by Edward R. Jaffe, M.D., of North Miami Beach, served as a steering committee for a review and evaluation of a number of residential drug abuse treatment centers. The effort focused on the availability and utilization of diagnostic, therapeutic and emergency medical services. The Committee's 425-page report included more than 15 recommendations for improving medical care in these programs.

Recent Committee recommendations to the Board of Governors have dealt with confidentiality of patient identification information in connection with mental health or drug abuse programs; suggested regulations for the use of amphetamines and methaqualone by the Board of Medical Examiners; and the need for a study on the use of barbituates in medical practice.

Future Committee programs include keeping the FMA membership informed on how substance abusers obtain legal prescriptions, and prison drug abuse programs.

## Committee on Rural Health

The Committee on Rural Health, under the direction of Wilmer J. Coggins, M.D., of Gainesville, is one of the most active committees of the Council. Since 1976, it has planned and conducted three FMA-sponsored Physician Recruitment Conferences for rural and medically underserved communities. The goal of these conferences is to provide information about recruitment techniques and to promote better distribution of physicians in Florida.

With the approval of the Board of Governors, the Committee will conduct a rural physician survey in connection with an issue of the FMA "Briefs" to determine what problems rural physicians are facing.

Other projects on which the Committee is working include: studying the feasibility of the privately-funded rural health clearing house for recruiting physicians for medically underserved areas; working with the FMA Committee on Continuing Medical Education in designing a CME program that would be easily accessible for rural physicians; and looking into the proliferation of federally-funded health clinics in areas where there are no medical shortages.

## The Council on Medical Services

**Joseph T. Ostroski, M.D.**
**Chairman**

(See "Know Your Council Chairmen," Page 184)

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**Roy M. Baker, M.D.**
**Chairman**
**Committee on Emergency Medical Services and Medical Telecommunications**

Dr. Baker, a native of Jacksonville, is a 1948 graduate of Emory University School of Medicine. Long active in emergency medicine, Dr. Baker, a cardiologist, also has served on the AMA Committee on Emergency Medical Services.

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**Edward W. Stoner, M.D.**
**Chairman**
**Committee on School Health**

Dr. Stoner, a family physician at Oviedo, is a graduate of the College of Physicians and Surgeons in Boston. He is a Past President of the Orange County Medical Society and a former member of the FMA Board of Governors.

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**Clarence L. Brumback, M.D.**
**Chairman**
**Committee on Public Health**

Dr. Brumback was born in Denver, Colo., and is Director of the Palm Beach County Health Department. He is a 1943 graduate of the University of Kansas School of Medicine, and later received a Master of Public Health degree from the University of Michigan.

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**Edward B. Jaffe, M.D.**
**Chairman**
**Committee on Drug Abuse**

Dr. Jaffe is a native of Brooklyn, N.Y., and is a 1946 graduate of Chicago Medical School. He practices pediatrics in North Miami Beach.

* * *

**Wilmer J. Coggins, M.D.**
**Chairman**
**Committee on Rural Health**

Dr. Coggins, a native of Madison, Fla., is a graduate of Duke Medical School. He is Professor and Director of the Division of Rural Health of the Department of Community Health and Family Medicine, University of Florida College of Medicine.

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**Richard B. Shaara, M.D.**
**Chairman**
**Committee on Sports Medicine**

Dr. Shaara was born in New Jersey and graduated from the University of Texas Medical School in Galveston in 1963. He is Director of Student Health Services at the University of Florida.

### Committee on Sports Medicine

In 1976, an Ad Hoc Committee on Sports Injuries was appointed to study the number of serious athletic injuries occurring in Florida schools. In 1978, the Committee was renamed the Committee on Sports Medicine and placed under the Council on Medical Services. Richard B. Shaara, M.D., of Gainesville, is Chairman.

The Committee has established effective linkage with the Florida High School Activities Association and the Florida Athletic Coaches Association. Committee members have served as faculty for conferences sponsored by these organizations.

Some of the recommendations arising from the Committee have been controversial. Voices of protest were raised around the State when the FMA adopted a policy concerning the use of trampolines as a result of the Committee's determination that these devices are unsafe even under supervised conditions. However, similar statements later by national organizations as well as court decisions in liability cases involving trampolines have vindicated the Committee's judgement.

At the present time, the Committee is discussing ways of developing an athletic trainer program for junior and senior high schools and planning a statewide conference on the medical aspects of sports.

### Summary

All of the committees under the Council on Medical Services are studying and promoting programs for improving the delivery of medical care in Florida. Last year, the Council developed 31 recommendations to the Board of Governors. This year there will be even more.

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## A Teacher Speaks

**I must not interfere with any child, I have been told.**
**To bend his will to mine, or try to shape him thru some mold**
**of thought. Naturally as a flower he must unfold.**
**Yet flowers have the discipline of wind and rain,**
**and though I know it gives the gardener much pain,**
**I've seen him use his pruning shears to gain**
**more strength and beauty for some blosssoms bright.**
**And he would do whatever he thought right.**
**To save his flowers from a deadening blight.**
**I do not know — yet it does seem to me**
**that only weeds unfold just naturally.**

**Alice Gay Judd**

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This poem has been in the possession of Dr. Henry King Stanford, President, University of Miami, for 30 years. He states that he ran across it for the first time when he was the new President of Georgia Southwestern College at Americus, Georgia and was so impressed with the sentiment and common sense of the poem that he saved it and has used it in speeches over the years.

# The Council on Medical Systems

James L. Borland Jr., M.D.

The Florida Medical Association's Council on Medical Systems was born in an FMA reorganization that took place during the presidency of Thad Moseley, M.D., in 1974-75. At the time, state and federal governmental interest in health care was growing rapidly.

Also contemporary with the reorganization was a profusion of innovations in the practice of medicine: Health Maintenance Organizations (HMOs); Foundations for Medical Care; Individual Practice Associations, etc. Peer review concepts and cost consciousness were also developing rapidly. The expansion of regulations dealing with health care, from both state and federal regulatory agencies, was becoming a consuming problem. Professional Standards Review Organizations (PSROs) already were being developed, and Health Systems Agency (HSA) legislation was being considered.

The Council on Medical Systems was organized to assist the FMA in responding to these challenging developments. Four committees constituted the original structure of the Council: Committee on Government Programs, Peer Medical Utilization Review (PMUR) Committee, Committee on Nursing Homes and Extended Care Facilities, and the Committee on Foundations for Medical Care.

### Committee on Government Programs

The Committee on Government Programs had the awesome task of reviewing the growing numbers of federal and state regulations and of advising the FMA Board of Governors of those which required prompt action before implementation. The Council also had the responsibility for reviewing existing laws and regulations and suggesting legislative action to the Board to change or modify those which were causing problems in medical care. Dr. Edward L. Farrar of Orlando, with characteristic diligence, accepted this challenge and successfully managed this enormous task.

**The Author**

*JAMES L. BORLAND JR., M.D.*

*Dr. Borland is a practicing gastroenterologist in Jacksonville, Florida. He is Chairman of the FMA Council on Medical Systems and President of the Florida Health Data Corporation, Inc.*

### PMUR Committee

The PMUR Committee, which during its stormy beginnings earned both the commendation of the FMA and, on occasion, considerable enmity, began as a Committee of the Florida Medical Foundation under Dr. James B. Byrne of Miami. When the Council on Medical Systems was formed, the herculean tasks of the PMUR Committee, then, as now, chaired by Dr. Frank B. Hodnette of Pensacola, were transferred to the new Council.

Under Dr. Hodnette's leadership, the Committee expanded its peer review role to include—in addition to the Medicare Peer Review contract—arbitration of disputes between private insurers and practicing physicians. This Committee was in large part responsible for the ability of the FMA to work satisfactorily with the government and private insurers, and to diminish considerably the problems of excessive regulation which occurred in many other states.

### Committee on Nursing Homes and Extended Care Facilities

The Committee on Nursing Homes and Extended Care Facilities, chaired by Dr. Jerry F. Cox of Boynton Beach, became involved with problems between such institutions, physicians and third party payers. The Committee conducted instructive seminars to assist medical directors, peer review committees and administrators. They were responsible for the harmonious working relationships between the management teams formed from these diverse groups. Many problems of crisis potential were brought to the Committee and handled promptly and fairly.

### Committee on Foundations for Medical Care

As the advantages of a pluralistic approach to the practice of medicine became apparent, interest in the Foundation and HMO approaches to "health care delivery" began to develop in Florida. The FMA recognized the need for information concerning these concepts. The Committee on Foundations for Medical Care was formed to aid physicians in understanding the complexities involved in establishing Foundations and

HMOs; and to assist them in the technical aspects of their formation.

Seminars and other educational programs were conducted by the Committee to these ends. The FMA Board of Governors was kept informed by the Committee of the developments in the Foundation and HMO movements in Florida and throughout the country.

### Alternative to PSRO

The Council on Medical Systems was assigned the responsibility for developing a statewide peer review system within the private sector, to function in upgrading the appropriateness and quality of medical care. After studying various techniques for developing such a system, it became apparent that no mechanism existed to obtain, on a statewide basis, the one ingredient needed for a coordinated, concurrent, and effective peer review system: statistical data on patient care.

It also was obvious that a consortium of "health care providers" (i.e., physicians and hospitals) was needed. Accordingly, the Council, in conjunction with the Florida Hospital Association and the Florida Osteopathic Medical Association, established a steering committee which ultimately formed the Florida Health Data Corporation (See "The Florida Health Data Corporation, Inc." elsewhere in this issue). This organization was designed to collect uniform data and develop the structure, utilizing this data, for establishment of the peer review system.

### Present Council Structure

The Council has been reorganized this year under the direction of FMA President O. William Davenport, M.D., to encompass a new set of priorities. The committees which now constitute the Council are: Committee on Medicaid and Foundations; Committee on Health Systems Agencies; and the Liaison Committee to the Florida Health Data Corporation.

Dr. H. Phillip Hampton of Tampa heads the Committee on Medicaid and Foundations, and advises the Board of Governors as to appropriate positions and responses to the constantly changing regulations and directives from these agencies. In addition, the Committee is working closely with industry in developing acceptable alternative mechanisms for health care delivery in Florida.

The Committee on HSAs, chaired by Dr. Charles Tate of Miami, is actively involved in seeking ways to help the HSAs develop appropriate techniques for health care planning. The Committee's responsibilities also include facilitation of physician representation on local HSAs, developing mechanisms for enhancing the effectiveness of physicians serving on these agencies, and guidance of the efforts at coordination of HSA activities at a statewide level.

The Liaison Committee to the Florida Health Data Corporation is formed by the members appointed to the Board of the FHDC. Their major responsibility is to ensure that the FHDC is accomplishing the directives of the FMA to establish uniform data collection and utilization and to ensure the privacy of such data within the private sector.

### Summary

The Council on Medical Systems was formed to assist the FMA in coping with new and rapidly developing activities in health care. It has continued to change both in structure and purpose in response to the needs of the FMA.

None of the accomplishments of the Council could have been achieved without the continued and diligent work of the various staff members of the FMA who have supported the Council throughout its existence. The Chairman wishes to recognize the unflagging support of former FMA staffers Eugene L. Nixon and Jean Burner, and of Mr. John B. Richardson, the current staff member assigned to the Council; and to offer them his personal word of thanks for a job well done.

### The Council on Medical Systems

**James L. Borland Jr., M.D.**
**Chairman**

(See "Know Your Council Chairmen," Page 184)

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**Charles F. Tate, M.D.**
**Chairman**
**Committee on Health Systems Agencies**

Dr. Tate is a professor of Medicine, specializing in pulmonary diseases, at the University of Miami School of Medicine.

He is a native of Tazewell, Va., and attended the University of Virginia School of Medicine, graduating in 1949. He is a Past President of the Dade County Medical Association.

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**H. Phillip Hampton, M.D.**
**Chairman**
**Committee on Medicaid and Foundations**

Dr. Hampton was born in Tampa, where he now practices internal medicine.

He received his M.D. degree from Emory University in 1937, and was President of the Florida Medical Association in 1965-66.

He was Chairman of the old Florida Regional Medical Program from 1965 to 1975.

# The Council on Scientific Activities

Yank D. Coble Jr., M.D.

*The practice of medicine shall be based on scientific principles.*

This philosophy, espoused in the American Medical Association and Florida Medical Association Code of Ethics, has been the foundation for, and the distinctive character of, the doctor of medicine. As Abraham Flexner so appropriately stated in his report, *Medical Education in the United States and Canada* in 1910, "Medicine is part and parcel of modern science."

Scientific work has always been a vital program area within the Florida Medical Association, and within very recent years it has assumed added dimensions.

Dr. John P. Wall of the South Florida Medical Society apparently was the first to present a scientific paper before an FMA assemblage when he lectured on "Preventive Medicine" at the Second Annual Meeting in Jacksonville on February 17, 1875. According to the official proceedings, Dr. Wall's paper was "interesting and carefully prepared" and "received marked attention."

The "science of medicine" in those days, of course, was not nearly so "scientific" as it is today. It probably never occurred to physicians of 1875 that medical advances in the next century would be beyond the capabilities of any one man to assimilate. And living in the pre-Flexner era, Dr. Wall and his colleagues had little indication of the great upheaval that was to take place in medical education. It is unlikely they would have suspected that one day politicians, "consumer advocates", and even physicians would talk of *requiring* physicians to participate in continuing medical education as a condition for membership in a medical society or as a requirement for retaining the privilege of practicing medicine, as is now the case in more than 20 states. Such terms and concepts as "CME accreditation", "university without walls", and "Physician's Recognition Award" were many years in the future.

**The Author**

*YANK D. COBLE JR., M.D.*

*Dr. Coble is a practicing endocrinologist in Jacksonville, Florida. He is Chairman of the FMA Council on Scientific Activities and the Ad Hoc Committee on Nutrition; and is President of the Duval County Medical Society.*

According to the FMA By-laws, the Council on Scientific Activities "shall direct and supervise activities . . . which pertain to *The Journal* and other scientific publications, the schedule and program of all Association meetings, continuing medical education, and all scientific research . . . it shall direct and supervise those activities of the Association which pertain to medical education and medical schools and hospitals. It shall study and investigate any aspect of medical school activities and intern and resident training . . . it shall maintain liaison with all recognized medical schools in the State of Florida . . . "

## Organization

The Council's work is accomplished primarily through three committees: Scientific Publications, Medical Education, and Continuing Medical Education. Each of these committees meets two or more times per year. Committee members are appointed annually by the incoming President and traditionally reflect continuity with prior committees while including new appointments each year, wide specialty and geographic representation, and usually diverse physician personalities.

The Council is composed of the chairman of the three committees and the Council Chairman. The Council meets at least twice a year to review the work of the committees and to finalize recommendations for the FMA Executive Committee and Board of Governors. Yank D. Coble Jr., M.D., a Jacksonville endocrinologist, is serving his second year as Council Chairman, having previously chaired the Committee on Continuing Medical Education. O. Frank Agee, M.D., Professor of Radiology at the University of Florida College of Medicine, is in his second year as Chairman of the Committee on Continuing Medical Education, having previously been Vice Chairman in charge of the Annual Meeting Scientific Program. J. Donald Wargo, M.D., an obstetrician-gynecologist in Boca Raton, is chairing the Committee on Medical Education for the fourth year. Gerold L. Schiebler, M.D., Professor and Chairman of Pediatrics at the University of Florida College of Medicine, has been Chairman of the Committee on Scientific Publications for three and a half years. In this role he also serves as Editor of *The Journal of the Florida Medical Association.*

## Committee on Continuing Medical Education

The Committee on Continuing Medical Education is composed of its Chairman, a Vice Chairman who is responsible for the Annual Meeting Scientific Program, representatives of continuing medical education programs at Florida's three university medical centers, and five practicing physicians.

In 1972, the Florida Medical Association House of Delegates adopted the policy "that thirty hours of continuing medical education be established as a minimum requirement for maintenance of Association membership, to become effective January 1, 1974. . . " Florida thus became one of the first state medical associations to mandate CME for its members. During 1972-73, the Committee concentrated on procedures which were adopted by the House in 1973.

Since then, the mandatory CME program has been modified in several ways, including the relatively recent acceptance of board certification or recertification as a pathway to meeting the requirements in full, and extending the requirement of continuing education to all practicing physician members. However, in view of the unproven benefit and controversial nature of mandatory continuing medical education, the basic principles of a relatively simple but flexible program (in comparison with states with *legislated* mandatory continuing medical education) and responsibility on an individual and local medical society level have been maintained.

## Quality CME at Low Cost

Since the initiation of the CME program, the Committe's activity has been directed primarily toward providing the opportunity for practicing physicians to obtain high quality continuing education at reasonable cost, and at convenient times and locations throughout the State. These activities have been accomplished through the following subcommittees:

1. *Subcommittee on Annual Meeting Scientific Program:* It is the responsibility of the Committee on CME to develop the Annual Meeting Scientific Program in cooperation with the FMA-recognized specialty groups. The scientific section programs are developed by the specialty groups with the Subcommittee serving in an advisory, administrative and coordinating role.

In 1975, the Subcommittee introduced the Wednesday afternoon scientific session, making it possible for FMA members to earn the full year's quota of 20 hours of Mandatory Credit under the FMA program by attending the Annual Meeting alone. No registration fee is charged FMA members for any part of the Annual Meeting Scientific Program.

At the present time, the Subcommittee is working with the FMA Ad Hoc Committee on Nutrition to develop and implement a nutrition theme utilizing speakers of national prominence for the 1979 Annual Meeting.

2. *Subcommittee on Program Approval:* To assist FMA members in identifying those continuing medical education activities that are of high quality and acceptable for meeting the individual CME requirements of the FMA (in addition to those already so designated by the AMA, medical schools, accredited institutions and organizations, and the FMA-recognized specialty societies), the Committee has developed a system of program approval. The Subcommittee on Program Approval reviews for award of Mandatory Credit certain CME programs that are first evaluated by local county medical society CME chairmen.

3. *Subcommittee on Accreditation:* In 1974, the American Medical Association Council on Medical Education designated the FMA Committee on CME to act as its agent in Florida in the accreditation of the continuing medical education activities of community hospitals, county medical societies, and specialty groups. These accredited groups may sponsor or co-sponsor continuing education activities and certify them as meeting the criteria for AMA Category I Credit.

On October 24, 1974, a survey team representing the Committee conducted an inspection of the program of the Halifax Medical Center in Daytona Beach, which later became the first institution accredited by the AMA as a result of an FMA survey. Since that time, the following other hospitals and organizations have been accredited as a result of FMA inspections: Sarasota County Medical Society; Dade County Medical Association; South Florida Psychiatric Society; Florida Academy of Family Physicians; Florida Medical Foundation Medical Education Committee; Mercy Hospital and Cedars of Lebanon Health Care Center, both of Miami; Tallahassee Memorial Hospital, Tallahassee; Hollywood Memorial Hospital, Hollywood; Orlando Regional Medical Center, Orlando; and the Veterans Administration Center, Bay Pines.

4. *Subcommittee on Exemptions and Extensions:* This Subcommittee is charged with reviewing applications from individual members for reduction in required hours, extension of cycle and exemption from the requirements of the CME program. The appropriate county medical society first reviews the merits of the specific case and forwards recommendations to the Subcommittee for action.

5. *Central Registry:* The Committee maintains a mechanized registry of continuing medical education activities at the FMA Headquarters in Jacksonville. The registry contains information on all CME activities that have been approved for FMA Mandatory Credit. Sponsors of CME activities consult the registry as a precaution against scheduling conflicts.

## Committee on Scientific Publications

The principal assignment of the Committee on Scientific Publications is to produce and publish the monthly *Journal of the Florida Medical Association.*

The award-winning publication is the product of the efforts of hundreds of Florida physicians who in the past three years have been called upon to submit scientific manuscripts, review books, write editorials and special articles, critique articles, and to contribute in other substantial ways. Indeed, it has been the continuing effort of the Committee to involve as many Florida physicians as possible to make the publication more relevant to their needs.

1. *Special Issues: The Journal* has particularly distinguished itself through publication of special issues. These have won top honors in the Magazine Awards Contest of the Florida Magazine Association for three years running. Some of the significant special issues *The Journal* has published or is planning to publish include the specialties of dermatology, neurosurgery, otolaryngology, orthopedic surgery, and cardiovascular and thoracic surgery; Cuban Medicine; Nutrition; the traditional August Historical Issues; and, of course, this Special Issue on FMA Programs.

2. *Student Editors:* The Committee on Scientific Publications was the first FMA Committee to have student members since the FMA opened its membership roles to medical students in 1974. At present, two medical students sit on the Committee as Assistant Editors, and two others are members of the Committee's panel of consulting editors.

3. *JFMA Awards Contest:* In 1978, the First Annual Journal of the Florida Medical Association Awards Contest for County Medical Society Bulletins was successfully introduced. The purpose of this program is to recognize outstanding medical journalism at the local level and to foster improvement and encourage greater interest. The contest is being repeated in 1979.

## Committee on Medical Education

The Committee on Medical Education is often called "the committee of medical school deans" because the membership includes the deans of Florida's three medical schools. Also on the Committee are its Chairman and Vice Chairman, and the chairmen of each of the three medical school advisory committees.

This Committee, providing FMA's principal linkage with the medical schools, meets to discuss educational, economic, legislative, and other problems common to the schools, and to make appropriate recommendations to the FMA Board of Governors through the Council on Scientific Activities.

In April, 1976, the Committee made a major contribution to medical education when it brought together the deans and other representatives of the three medical schools for discussions with one of the chief promoters of "Fifth Pathway" legislation.

The FMA opposed "Fifth Pathway" because it permitted American citizens enrolled in foreign medical schools to return to Florida (prior to meeting foreign internship or social service requirements for the

**The Council on Scientific Activities**

**Yank D. Coble Jr., M.D.**
**Chairman**

(See "Know Your Council Chairmen," Page 184)

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**O. Frank Agee, M.D.**
**Chairman**
**Committee on Continuing Medical Education**

Dr. Agee is a native of Johnson City, Tenn., and a graduate of the Louisiana State University School of Medicine. He is Professor of Radiology at the University of Florida College of Medicine in Gainesville.

In his second year as Chairman of the Committee on Continuing Medical Education, he served previously for two years as Vice Chairman. Dr. Agee was Chairman of the now defunct FMA Subcommittee on Quackery and served for a time as a member of the AMA Committee on Quackery. The former President of the Alachua County Medical Society is an incumbent member of the FMA Judicial Council.

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**Gerold L. Schiebler, M.D.**
**Chairman**
**Committee on Scientific Publications**

As Chairman of the Committee on Scientific Publications, Dr. Schiebler is in his fourth year as Editor of *The Journal of the Florida Medical Association.* The Hamburg, Pa., native is Professor and Chairman of the Department of Pediatrics at the University of Florida College of Medicine.

A graduate of Harvard Medical School, Dr. Schiebler has been an active participant in the affairs of FMA and many other medical and medically related groups. He formerly served as Chairman of the FMA Council on Scientific Activities. He is a Past President of the Florida Heart Association, and was the first Director of Florida's Division of Medical Services when that agency was established in 1973.

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**J. Donald Wargo, M.D.**
**Chairman**
**Committee on Medical Education**

Dr. Wargo is a native of Allentown, Pa., and received his M.D. degree from Temple University School of Medicine. He practices obstetrics and gynecology at Boca Raton and Delray Beach, and has chaired the Committee on Medical Education since 1975.

Dr. Wargo took his residency training at the Jackson Memorial Hospital in Miami and is a Diplomate of the Medical Advisory Committee of the University of Miami School of Medicine.

doctorate degree) to study in a university-affiliated hospital clinical setting for only one year and then become eligible for an M.D. degree from a domestic medical school and for licensure by examination. A compromise acceptable to the deans and Legislature evolved in which each medical school would take a limited number of the top students and introduce them to the curricula at no higher than the third-year level.

Principal areas of concern for the Committee on Medical Education at the present time are medical student financial aid, which is assuming crisis proportions, and government intervention in medical education.

With the Council on Scientific Activities, the Committee on Medical Education sponsors the Annual Dean's Luncheon during the FMA Annual Meeting. These functions, designed to honor the deans, always lead to productive discussions of problems in medical education.

### Florida Medical Foundation

The Council on Scientific Activities has assisted and collaborated with the Florida Medical Foundation in the important areas of research and continuing medical education.

1. *Research:* Sitting as the Committee on Research, the Council reviews applications for Florida Medical Foundation research grants and makes appropriate recommendations to the Foundation's Board of Directors for funding. Progress reports by the awardees are reviewed and recommendations for continued funding are made if warranted and if funds are available.

2. *Committee on Medical Education:* The Council on Scientific Activities' Committee on Continuing Medical Education, being approved by the AMA to function as the accrediting organization in Florida (see above), cannot itself be accredited to give Category I CME Credit. Thus the Council on Scientific Activities and the Committee on Continuing Medical Education encouraged and assisted the Florida Medical Foundation to develop its own Committee on Medical Education, which was first accredited in 1977. Since that time, the Foundation Committee has co-sponsored continuing medical education programs offering more than 235 hours of AMA Category I Credit throughout the State.

More recently, the Foundation Committee has established a registry of scientific speakers within the State. This registry contains information on more than 300 Florida physicians who are available to present scientific programs within their specialties at meetings of county medical societies and hospital medical staffs at minimal cost.

These functions of the Foundation have vitally assisted the Council in greatly improving the availability of high quality continuing medical education offerings throughout the State.

### Summary

Virtually all of the scientific work of the Florida Medical Association is considered and acted on by the Council on Scientific Activities. Through an organization of committees and subcommittees, the Council has various responsibilities associated with undergraduate, graduate, and continuing medical education; the publication of *The Journal*; arrangement of the Annual Meeting Scientific Program; CME accreditation and program approval; FMA's individual CME program; and the Florida Medical Foundation research grants program.

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**You will find it less easy to uproot faults than to choke them by gaining virtues. Do not think of your faults, still less of other's faults. In every person who comes near you, look for what is good and strong, honor that; try to imitate it and your faults will drop off like dead leaves when their time comes.**

**— John Ruskin**

# The Council on Specialty Medicine

Dick L. Van Eldik, M.D.

The Florida Medical Association's Council on Specialty Medicine is composed of one representative designated by each of the 37 specialty groups recognized by the FMA. It meets three or four times a year to consider matters that affect not only individual specialties but indeed the entire medical community.

Among its many duties, the Council:

—Serves as liaison between FMA and the specialty groups in the coordination of scientific activities and legislative programs.

—Assists the FMA Council on Scientific Activities in developing and reviewing continuing medical education requirements for members.

—Assists in the coordination of the scientific section programs at annual meetings of the FMA.

—Arranges for the appropriate specialty groups to carry out a wide range of health activities relating to hearing, vision, maternal and child health, sports medicine, mental health, and many others.

—Considers and attempts to formulate consistent policies that can be recommended for implementation to the FMA.

## Conflicting Interests

Occasionally, the interests of a specific specialty group and the interests of the entire medical community are in conflict, in which cases, the Council on Specialty Medicine attempts to suggest a satisfactory solution. The Council has always considered the patients' needs to be uppermost while at the same time being responsive to the needs of organized medicine.

## Future Council Activities

Activities of the Council's recent past were reported completely and concisely to the 1978 House of Delegates by the Council's former, very capable chairman, Dr. Frederick C. Andrews. Therefore, this article will emphasize some of the Council's future programs and objectives.

Perhaps one of the most difficult programs facing the Council is the development of criteria for the annual recognition of specialty groups. In recent years, several new medical organizations have been created. Many are worthwhile and will contribute to the advancement of quality medical care; others will fall by the wayside and may cause decay of well-founded groups, and threaten the integrity of the organization as a whole.

In order to assist in the formation and preservation of worthwhile groups, the 1978 House of Delegates mandated an annual recognition program. The Council is to develop criteria and was given responsibility for review of applications and recommendations to the Board of Governors.

## Health Systems Agencies

The Council anticipates considerable activity in regard to Health Systems Agencies (HSAs), and will work closely with the FMA Committee on HSAs in the development of a rapid method of response to detrimental developments in that area. The Council will focus its efforts on a method of informing FMA membership as a whole concerning the devastating threat to private practice inherent in the entire health planning law and process. The Council also will direct attention to composition of HSA boards, particularly the membership ratio of provider to consumer. In this case, the definition of "provider" is so broad as to make the entire matter farcical. The Council will address itself to a recommendation to the Council on Legislation and Regulations for attempted legislative relief.

## Other Activities and Programs

*Advanced Nurse Practitioners:* The Council, along with the FMA Committee on Allied Health Professions, will monitor carefully the activities of Advanced Nurse Practitioners, who have demanded the ability to perform procedures now in the realm of practicing physicians.

**The Author**

*DICK L. VAN ELDIK, M.D.*

*Dr. Van Eldik is a family physician at Lake Worth, Florida. He is Chairman of the FMA Council on Specialty Medicine.*

Support will be given to the members of the Florida Board of Medical Examiners who serve on the Joint Advisory Committee to the State Board of Nursing.

*Annual Meeting Scientific Program:* The Council has been made aware of the advisability of specialty groups submitting their scientific section programs for the FMA Annual Meeting at an earlier date. The Council agrees that earlier submission and publication would contribute to a more interesting and attractive program.

*Legislative Activity:* Careful attention will be paid to legislative activity affecting individual specialty groups as well as the entire medical community. Some specialty groups in the past have engaged in legislative activity that has not been completely consistent with FMA policy. The Council will encourage guidelines to coordinate all legislative efforts and a close relationship with the Council on Legislation and Regulations is anticipated.

*Miscellaneous Proposals:* Under study are several proposals by individual specialty groups on which recommendations will be made eventually to the Board of Governors. These include a position on "Cerebellar Stimulator Pacemakers," insect sting kits, mandatory immunization requirements for students entering college, breast examination programs, and others.

## Conclusion

FMA members can be assured that the Council on Specialty Medicine will consider all requests regarding methods or attitudes involving health care in Florida. Decisions and recommendations will be in the interest of our patients and quality medical care.

We would like to take this opportunity to express sincere gratitude to all members of the Council and to the very capable FMA staff, especially Mr. Robert Harvey, whose assistance, efforts and advice have been invaluable.

### The Council on Specialty Medicine

**Dick L. Van Eldik, M.D.**
**Chairman**

(See "Know Your Council Chairmen," Page 184)

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John E. Startzman, M.D., Orlando, Vice Chairman, and Representative of the Fla. Obstetric and Gynecologic Soc.
Melvin Newman, M.D., Jacksonville, Fla. Allergy Soc.
John A. Rush Jr., M.D., Jacksonville, Fla. Soc. of Anesthesiologists
Dean D. Mergenthaler, M.D., North Palm Beach, Fla. Chap., Am. Col. of Chest Physicians
Jack W. MacDonald, M.D., Tallahassee, Fla. Soc. of Clinical Oncologists
Jack H. Bowen, M.D., Jacksonville, Fla. Soc. of Dermatology
Fredric C. Wurtzel, M.D., Maitland, Fla. Chap., Am. Col. of Emergency Physicians
Andrew T. Scoma, M.D., Maitland, Fla. Endocrine Soc.
Donald G. Nikolaus, M.D., Dunedin, Fla. Acad. of Family Physicians
Frank C. Bone, M.D., Orlando, Fla. Gastroenterologic Soc.
Clarence M. Gilbert, M.D., Orlando, Fla. Soc. of Internal Medicine
Gregor Alexander, M.D., Orlando, Fla. Soc. of Neonatal-Perinatologists
Charles P. Hayes, M.D., Jacksonville, Fla. Soc. of Nephrology
William M. Haycook, M.D., Jacksonville, Fla. Soc. of Neurology
William E. Hoffmeister, M.D., Winter Park, Fla. Neurosurgical Soc.
Lawrence R. Muroff, M.D., Tampa, Fla. Assn. of Nuclear Physicians
Tom Bates, M.D., Orlando, Fla. Soc. of Ophthalmology
W. J. Hutchison, M.D., Tallahassee, Fla. Orthopedic Soc.
Salvadore J. Barranco, M.D., Winter Haven, Fla. Soc. of Otolaryngology
Wayne H. Schrader, M.D., Orlando, Fla. Soc. of Pathologists
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Ira H. Gessner, M.D., Gainesville, Fla. Assn. of Pediatric Cardiologists
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Herbert D. Kerman, M.D., Daytona Beach, Fla. Radiological Soc.
Louis Sales, M.D., Jacksonville, Fla. Soc. of Rheumatology
Martin G. Gould, M.D., Ft. Pierce, Fla. Chap., Am. Col. of Surgeons
Walter W. Hamilton, M.D., St. Petersburg, Fla. Soc. of Colon and Rectal Surgeons
William H. Meyer Jr., Ft. Pierce, Fla. Assn. of General Surgeons
Ralph L. Swank II, M.D., Tampa, Fla. Assn. of Pediatric Surgeons
Francisco Herrero, M.D., Daytona Beach, Fla. Soc. of Plastic and Reconstructive Surgeons
Julian A. Rickles, M.D., Miami Beach, Fla. State Surgical Div., International Col. of Surgeons
Robert B. Trumbo, M.D., Orlando, Fla. Soc. of Thoracic and Cardiovascular Surgeons
Allan L. Goldman, M.D., Tampa, Fla. Thoracic Soc.
Truett Frazier, M.D., Orlando, Fla. Urological Soc.

# FMA Insurance Programs

**Jack A. MaCris, M.D.**

The Florida Medical Association has had an active insurance program for its membership for many years. It has pioneered various forms of coverage for Florida physicians, and it was primarily on the basis of this long and continued interest in the insurance field that allowed the FMA to undertake its courageous self-insurance program in the field of professional liability insurance coverage. This, of course, has been the largest financial undertaking of the FMA. Periodic reports have been issued regularly to the House of Delegates during its meetings, and individual mailings have been sent regularly to the membership. This is but another attempt to keep the Florida physician informed and current regarding Florida Medical Association sponsored insurance programs.

Our programs are managed by PIMCO, the Professional Insurance Management Company, established by the Florida Medical Association in 1975 at the time we established the FMA-PLI-Trust. PIMCO serves as the insurance agent for the FMA sponsored insurance plans, and as such performs administrative and promotional duties which include servicing applications and processing claims. The following insurance plans are available through the FMA program for eligible Florida physicians.

### The Income Protection Insurance Plan

This plan pays your choice of benefits from $25 to $450 per week each week you are totally disabled by a covered accident or illness, starting on the 31st day of total disability. The Basic Plan pays benefits for up to 5 full years when a covered accident or illness prevents you from practicing medicine. The Extended Plan pays benefits up to age 65 when a covered accident or illness prevents you from earning an income. Plans with elimination periods of 60, 90, 180, and 365 days are also available.

Eligibility . . . all members of the Florida Medical Association under age 60 may apply.

### Overhead Expense Plan

Pays 100 percent of your eligible office expenses for up to 18 full months when you are totally disabled. The amount of benefits you receive is determined by the average of your expenses for the six-month period prior to your disability.

You choose the benefit amount that best suits your needs from $500 to $5,000 per month. When you are totally disabled, the Plan will pay 100 percent of the first $3,500 of eligible expenses and 60 percent of any additional expenses up to a maximum total monthly benefit of $5,000.

Choose from two plans: 1. Provides benefits after 15 days of disability; 2. Provides benefits after 30 days of disability.

Eligibility . . . all active members of the Florida Medical Association under age 60 may apply.

### Hospital Money Plan

Pays benefits . . . to age 65. You will receive your chosen daily benefit (up to $100 per day is available) from the first day of hospitalization up to age 65 if you are hospitalized before reaching age 64.

. . . After age 64. If you are hospitalized after reaching age 64, benefits will be paid up to one year. Coverage continues up to lifetime.

Acceptance Guaranteed . . . all FMA members, their spouse, and unmarried dependent children age 15 days to 25 years may enroll.

Benefits paid in addition to all other insurance.

### Accidental Death and Dismemberment Plan

Acceptance is guaranteed to all eligible members regardless of past or present health history and their spouses. Provides up to $150,000 in benefits for accidental death and dismemberment.

Benefits paid in addition to any other insurance you may carry.

### Catastrophe Hospital Plan

Select from two plans with deductible amounts of $500 and $750.

Only one deductible amount will be applied when more than one member of your family is injured in the same accident or contracts the same contagious disease within 30 days. And each member is eligible for full $20,000 benefits.

Eligibility . . . all members of the Florida Medical Association under age 60 are eligible to apply for the plan. You may also apply for coverage for your spouse and unmarried dependent children between the ages of 15 days and 25 years.

### The Excess Major Medical Plan

$500,000 maximum for each accident or illness.

This program was designed to specifically help compensate for the expenses over and beyond those covered by most major medical plans. The plan incorporates a deductible feature that, along with the Florida Medical Association's mass purchasing power, helps to keep your premium cost low. The deductible amount for this plan is $20,000 and must be satisfied within 2 years of the date of the accident or illness. You may use eligible expenses or any insurance which covers those expenses to satisfy the deductible. After a deductible is satisfied, the plan takes over and pays 100 percent of your eligible expenses for as long as 5 years, up to $500,000 for each accident or illness. The 5-year benefit period includes the 2 years provided for satisfying the deductible.

Eligibility . . . all members of the Florida Medical Association, under age 60, your spouse, and unmarried children between the ages of 15 days and 25 years may enroll.

### Term Life Insurance

Broad choice of coverages up to $100,000. Optional family coverages — up to $50,000 for spouse and up to $10,000 for children.

Conversion privilege — you may convert your term insurance to a plan of permanent Life Insurance regardless of health or physical condition when you reach age 70.

THE FLORIDA PHYSICIANS' INSURANCE RECIPROCAL . . .
IS THE ONLY PHYSICIAN-OWNED, MEDICAL SOCIETY-SPONSORED, PHYSICIAN-MANAGED PROFESSIONAL LIABILITY INSURANCE PLAN IN FLORIDA.

### The Reciprocal

. . . Provides a basic $500,000 modified claims-made coverage with no aggregate for the physician, with optional limits to $1 million or $1½ million available for those who desire.

. . . Provides coverage (by endorsement to the physician's policy) for employed Nurse Anesthetists and Physician's Assistants.

. . . Members of the FPIR are eligible to join the Patient's Compensation Fund for unlimited liability and receive a premium reduction from the PCF because of our high limits.

. . . Has reinsurance underwritten by Lloyd's of London and other underwriters.

. . . Provides automatic free conversion to an occurrence policy for death, disability, or normal retirement.

The Reciprocal has minimal overhead expenses and pays no commissions and is managed by the Professional Insurance Management Company (PIMCO) under a fee-for-service contract.

The Board of Directors (Advisory Committee) of he Reciprocal is composed of five practicing physicians — two are past presidents of the FMA; one is the current president; one is the president-elect; and the other member has served on the FMA Board of Governors for several years.

At the present time over 6,000 physicians are insured under this professional liability program.

Following is a brief consolidated report of the finances of the Florida Physicians' Insurance Reciprocal and its predecessor, the FMA Professional Liability Insurance Trust from December 1, 1975, through December 31, 1978, covering 37 months of operation. (This data represents accounting figures rounded to the nearest $1,000 and is subject to slight modification upon audit of 1978).

**INCOME**

| | | Ratio |
|---|---|---|
| Premiums | $51,555,000. | 86.55 |
| Capital Contributions | 4,879,000. | 8.19 |
| Investment Income | 3,041,000. | 5.11 |
| Other—Reinsurance Ceded Commission | 90,000. | .15 |
| | $59,565,000. | 100.00 |

**EXPENSES**

| | | |
|---|---|---|
| Claims Paid | $ 3,671,000. | 6.16 |
| Reinsurance Ceded Premium (Note 1) | 17,445,000. | 29.29 |
| Premium Deposits for Reinsurance (Note 1) | 3,436,000. | 5.77 |
| Dividends | 4,281,000. | 7.19 |
| Management Expenses (Note 2) | 3,915,000. | 6.57 |
| Taxes | 1,400,000. | 2.35 |
| | $34,148,000. | 57.33 |

**RESERVES**

| | | |
|---|---|---|
| Death, Disability and Retirement | $ 2,279,000. | 3.83 |
| Reserve for Reported Claims | 16,615,000. | 27.89 |
| Surplus (as required by law) 3:1 | 6,474,000. | 10.87 |
| Non-Admitted Assets | 49,000. | .08 |
| | 25,417,000. | 42.67 |
| | $59,565,000. | 100.00 |

Note (1) A portion of the reinsurance premium deposits may be recovered pending favorable development of loss results. The monies held in escrow are not assets of the Reciprocal.

| | | |
|---|---|---|
| Note (2) | Management Company PIMCO (a) | $3,669,000. |
| | Trustees' Account Expenses (b) | 59,000. |
| | Attorney-in-Fact Expenses (b) | 173,000. |
| | Trustees' and Directors' Fees & Travel | 14,000 |

(a) includes cost of promotion, underwriting, data processing, accounting, and claims investigation and supervision.

(b) includes audits, actuaries, tax attorneys, printing, postage, tax and legal consultants, insurance department examining fees, etc.

Although claims activity continues at a higher than desirable rate, there is a definite improved climate regarding medical malpractice problems here in Florida. The FMA-sponsored medical malpractice tort reforms enacted by the Legislatures of 1975-1978 have helped to improve our loss experience in Florida. The mediation panels, despite a rather shaky start have since been declared constitutional by the Florida Supreme Court and are working, though not entirely perfected, to the advantage of the claimant, the physician defendant, and the Reciprocal. They afford a speedy, less costly, forum in which the complaint can be heard and an opinion rendered. The decision of the mediation panel is admissible in court should the case go to trial.

The shortened statute of limitations as enacted by the 1976 Legislature stated that legal action must be started either two years after the event or two years after the discovery of the event, but in no event shall it exceed four years except in the case of fraud on the part of the defendant.

The other nine portions of the tort reforms have more to do with the actual trial of cases and our experience has been too limited in order to predict the effect that these will have upon future losses.

In addition, physician input has added new dimension in the handling of professional liability. Having a physician with 20 years' experience in actual practice as president of our management company has given our program a unique perspective at the top not previously known in the insurance industry. In addition, the use of approximately 100 physicians practicing throughout the State as "physician consultants" to assist our claims department gives added depth and accuracy in the decision-making process regarding claims.

The program to date has been financially sound, and we look forward to the future with reserved optimism.

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# The Blessed Gift

**What a priceless gift we bestow on others when we lift them to self-respect! And what magnanimous persons they are who undertake to do this!**

**Katharine Hathaway, the perceptive writer, suggested the catalytic effect of such persons in her description of one of her favorite classmates. Her friend, she wrote, had the sensibility to discern in an obscure person something rare and important . . . make other people see it, too — above all . . . to make the person in question feel it and be it.**

**She could hold an utterly unprepossessing person up in a certain light, like a collector showing a rare piece, and the person, in her hands, would suddenly receive a value and importance which made the persons watching the transformation wonder how they could have been so blind as never to have seen it before.**

**Of all gifts, this is the blessed gift — the gift of self-respect! Not riches, only an understanding heart is required to give it.**

# Organization of the Florida Medical Association Offices and Staff

James W. Walker, M.D.

The growth of the membership of the Florida Medical Association, Inc., the increasing number and complexity of programs and the issues affecting organized medicine have resulted in an increase in administrative staff and facilities. Since the formation of the Florida Medical Association in 1874, the corporate headquarters have been maintained in Jacksonville.

Office space was leased in the Florida Theatre Building prior to the erection of the headquarters at 735 Riverside Avenue in 1956. That building, expanded by additions in 1960 and again in 1975, served the needs of the Association for 21 years. In 1972, two converted apartment houses located nearby on May Street were acquired by the FMA to house Harlan-Med, Inc., which was a joint insurance agency venture with Harlan of Florida, Inc. On January 1, 1976, the Professional Insurance Management Company (PIMCO) replaced Harlan-Med and occupied the May Street buildings.

In April 1977, an insurance building located at 801 Riverside Avenue became available and was purchased by the FMA. This 12-year-old building with its outstanding riverfront property was purchased from the Commercial Union Insurance Company at an excellent price. The FMA building property at 735 Riverside Avenue and the May Street property were sold for more than their book value.

PIMCO, which occupies a portion of the first floor of the new building and leases its space, moved into the newly-acquired building in May 1977. FMA moved its offices in October 1977. FMA is located on the second floor of this two-story, Georgian, red-brick building which contains approximately 32,000 square fee.

Being housed in the same building has enabled the FMA and PIMCO to function more efficiently and to share many of the costs and equipment formerly incurred independently. Housed within the building and shared by both organizations are such facilities as a staffed reception area, a printing shop, letter-processing equipment, an on-line computer, and an employees' lounge. There is ample space for future growth of both organizations.

The FMA Jacksonville office, which serves as corporate headquarters, houses the office of the Executive Vice President, W. Harold Parham, D.H.A.; the Executive Director, Mr. Donald C. Jones; the Director of Medical Economics, Mr. John B. Richardson Jr.; the Financial Director, Mr. Ronald C. Cameron; the Director of Scientific Activities, Mr. Edward D. Hagan; the Director of Medical Services, Mr. Robert J. Harvey; the Director of Management Services, Mrs. Wanda L. McWaters; and the editorial offices of *The Journal*. In addition, adequate support personnel serve the many projects of the FMA, its committees, the FMA Auxiliary, and the Florida Medical Foundation.

### FMA Capital Office

The FMA Capital Office in Tallahassee has been operational since 1969. During 1976 this office moved into new quarters at College Avenue and Adams Street, adjacent to the Hilton Hotel. This office, one block from the State Capitol, also serves as the North Florida Regional Office. With its modern, functional design, this renovated office is uniquely suited for serving the legislative affairs of the Association. It has space for future growth as well as offices for visiting FMA officers and other persons.

Mr. George S. Palmer Jr., serves as Manager of this Capital Office and is responsible for the field work in

**The Author**

*JAMES W. WALKER, M.D.*

*Dr. Walker, a graduate of the University of Tennessee College of Medicine, served as Secretary-Treasurer of the Florida Medical Association for many years. He practiced pediatrics in Jacksonville, Florida, until 1975, when he was elected President of the Professional Insurance Management Company (PIMCO).*

North Florida in addition to his duties as Executive Director of the Florida Medical Political Action Committee (FLAMPAC). The Director of the Legislative Affairs Department is Mr. Donald S. Fraser Jr.; and the Department of Government Programs is headed by Mr. Phillip H. Gilbert. Adequate support personnel are on the Tallahassee staff to carry out the functions of these departments.

### Branch Offices

In addition to the Corporate Headquarters and the Capital Office, the FMA, in conjunction with PIMCO, has opened two regional offices. One is located in North Dade County to serve South Florida and the other in the Host International Hotel in the Tampa International Airport to serve Central Florida. The functions of the Regional Offices are to serve the news media, legislators, county medical societies, and physicians in their area of the State.

The FMA South Florida Regional Office opened November 1, 1977, and is located in the Central Bank Building, 18350 Northwest Second Avenue, Miami. Mr. Eugene H. Johnson, formerly of the Dade County Medical Association, serves as Manager and is responsible for implementing the program and policy of the FMA as well as assisting the county medical societies and the physicians in the South Florida area. Mr. Richard Leach, a PIMCO Claims Investigator, is located in this office. The office secretary is shared by FMA and PIMCO.

The FMA Central Florida Regional Office was also opened November 1, 1977. Mr. Russell E. Berge, who formerly served as an aide to members of the Florida House and Senate, serves as manager of the office and has responsibilities similar to those of Mr. Johnson. Mr. David C. Cloud, a PIMCO Claims Investigator, is located in this office.

Each of the regional offices has a secretary and a small conference room. The Headquarters Office, the Capital Office, and the Regional Offices are interconnected by a system that permits the relay of letters or other documents by telephone lines. Each office also has capability for receiving and acting on urgent telephone messages after normal business hours.

### Coordination

The activities of the various offices are carefully coordinated. The departmental directors and the regional managers meet in Jacksonville on a monthly basis, and each program is reviewed. The design of the administrative staff with diversified office locations was developed to make the Florida Medical Association both accessible and responsive to its membership, the component county medical societies, and the FMA-recognized specialty societies. The growth of the Association's staff and offices has been carefully monitored by the Executive Committee and the Board of Governors to insure that it be accomplished in an orderly and efficient manner and in the best interest of the membership of the FMA.

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**People who are busy rowing seldom rock the boat.**

# The FMA Board of Past Presidents

George S. Palmer, M.D.

Each spring, when the FMA President ends his term, he automatically becomes a member of the Board of Past Presidents and serves as its Secretary for one year.

This Board, consisting of all living Past Presidents (as of this writing, there are 23), is an official entity of the FMA just as committees and councils are. As each retiring President becomes a member of the Board, he also becomes a Life Member of FMA. About a dozen years later, he may become Chairman of the Board.

This year, the Chairman is George S. Palmer, M.D., of Tallahassee (1966), and Secretary is Louis C. Murray, M.D., of Orlando (1977).

## Rights and Privileges

Until 1972, Past Presidents were voting members of the FMA House of Delegates. At that time voting privileges were withdrawn, but the Past Presidents still have the privilege of the floor and may speak on issues, make motions, nominate officers, serve on reference committees, etc. Some Past Presidents do have voting rights in the House by virtue of the fact that they have been designated Delegates by their county medical societies.

Members of the Board of Past Presidents are invited to all meetings of the House of Delegates and to the Fall Meeting of the Board of Governors. In this way the Past Presidents remain active participants in the affairs of organized medicine.

Each year the Board gathers for a breakfast meeting at the FMA Annual Meeting. Discussion ranges from the serious to the not-so-serious. Messages from Past Presidents who cannot attend are read; and those present share whatever news they have about the status of absentees.

**The Author**

*GEORGE S. PALMER, M.D.*

*Dr. Palmer is a graduate of Johns Hopkins School of Medicine and was President of the FMA in 1966. He now serves as Chairman of the FMA Board of Past Presidents. Dr. Palmer was a pediatrician in Tallahassee, Florida, until 1968, when he accepted appointment as fulltime Executive Director of the Florida State Board of Medical Examiners.*

The 1978 breakfast meeting drew a record 19 Past Presidents. The traditional group picture was taken and published in *The Journal.*

## Issues

From time to time the Board of Past Presidents will discuss problems confronting the FMA and make recommendations to the Board of Governors. In an article entitled "History of the JFMA" that was published in the January 1974 Centennial Issue of *The Journal*, Editor Clyde M. Collins, M.D., wrote:

"At the Annual Meeting that year (1955) the Board of Past Presidents recommended that the Board of Governors study the matter of poor attendance at the scientific sessions and determine the means of remedying the situation."

## Nature of Past Presidents

The Board of Past Presidents represents a wonderful group of physicians who have devoted many years of their lives in dedicated, honorable and outstanding service to organized medicine and their profession. Each started out as a neophyte member of his county medical society and the FMA and displayed an early interest in organizational affairs. Each served first "in the trenches" as a committee member, then possibly as a committee or council chairman, member of the Board of Governors, and officer.

Areas of involvement include county societies, hospital staffs, specialty sections and societies, FMA, AMA, Blue Cross-Blue Shield, voluntary health agencies, health planning councils, and many others.

The Board of Past Presidents truly epitomizes the leaders of FMA, past and present. Each member remains fiercely proud of the ultimate honor bestowed upon him by the membership, however many years ago.

Each member feels privileged to have had the honor of serving as President and to have enjoyed and to be able to continue to enjoy the most pleasant associations with so many outstanding persons and physicians through the years. Such memories are savored, and treasured; they are uplifting and a source of great pleasure and inspiration always.

# The Florida AMA Delegation

James T. Cook Jr., M.D.

I do not have enough conceit to think that merely because I am an AMA Delegate that all others should logically aspire to that station. Indeed, I understand that most would avoid such a position. To those who would like to displace me or one of the other members of the Florida Delegation, I have been asked by our FMA Secretary and Guest Editor of this issue of the JFMA, Bob Windom, to tell you how it's done.

He may be telling me something.

Recent changes have been made in the structure of the AMA House of Delegates to give greater representation to national specialty societies. If you wish to be a delegate from your national specialty society, go ahead and get elected. Each society probably has its own mechanism for choosing delegates.

This discussion concerns state medical association delegates. In this context, the American Medical Association is a federation of societies. Each state gets one delegate for every 1,000 AMA members or fraction thereof. Under this formula, Florida has seven delegates, the most junior one being in the tenuous position of facing political extinction should Florida's AMA membership drop significantly. For each delegate, there is an alternate delegate.

Each state has its own procedures for election. In Florida, four of our delegates and their alternates are elected for two-year terms one year, and the remaining three the following year. Elections are held at the FMA Annual Meeting.

Should any antagonistic or ambitious reader decide he wishes to displace me or one of the other delegates, all he has to do is get someone to nominate him Sunday morning of the FMA House of Delegates, then garner enough votes to win. I'm sure it's possible; it may be real easy. But as a matter of remembered FMA history, I can't recall an incumbent being opposed or beaten. All of the contested elections for delegate or alternate delegate have been for vacancies. For example, I ran (unopposed) for a new slot as an alternate delegate. Later I was elected delegate (unopposed) to succeed the late Bob Zellner of Orlando.

Now I'm not trying to say that none of us should be opposed; we just haven't been. I suppose that one reason is that after the election of the President-Elect, Vice-President, Secretary, Treasurer, and Speaker and Vice-Speaker of the FMA House of Delegates, our members are fed up with elections.

If you manage to nudge one of us incumbents into retirement, you then have a job to do. We have a well-organized delegation in Florida and discuss all important matters before the AMA House of Delegates meets.

Typically, the AMA House has its first session on Sunday afternoon; we meet from 10:00 a.m. to 2:00 p.m. that day, then attend the session. From then on, we meet on Monday, Tuesday and Wednesday from 7:00 a.m. until reference committees of the House of Delegates convene. Everyone in the Florida Delegation attends a reference committee, and quite often one of our delegates is a member of one of these committees. It all adds up to a 10-hour day until sometime between noon and 4:00 p.m. on Thursday, when the final gavel falls.

It can be stimulating, exciting and challenging, but it is often repetitious, nit-picking and tedious. The job must be done, however, and I believe each man in the Florida Delegation believes himself good at the job. I agree.

We do a lot of homework. The handbook sent to each delegate contains more than 300 pages. At the Annual Meeting in St. Louis last June, we considered more than 300 separate items of business, including 169 resolutions. I read fairly rapidly and it takes me several evenings to prepare myself by reading the Handbook. Unless he is fulltime, I can see no way any one person can be *completely* prepared for an AMA meeting. We just have to split the job up and do the best we can.

It doesn't necessarily take an extremely remarkable person to be an AMA Delegate. One must, however, have an urge to help organized medicine in some way. Some are ambitious politically, which is good. We need leaders. I wouldn't dare tell you what actuates each of our groups. In fact, I wouldn't care to discuss what actuates me.

**The Author**

*JAMES T. COOK JR., M.D.*

*Dr. Cook is a family doctor at Marianna, Florida. A graduate of Emory University School of Medicine in Atlanta, he served as President of the FMA in 1970-71 and is now Chairman of FMA's delegation to the American Medical Association.*

# Positive Public Relations Positive Health Care

Vernon B. Astler, M.D.

When I addressed the Called Meeting of the House of Delegates in February, 1976, as President, I observed that medicine was publicly on the defensive and that our public relations program was in need of reform if we were to survive as an effective professional body. Poll after poll has continued to indicate the high level of trust that physicians hold with the public. These polls also clearly indicate the public as being our greatest potential ally in stemming the threat of destruction of our medical care system.

The House responded with enthusiasm and provided the necessary funds to carry out an aggressive, offensive public relations campaign to take our story to the public in an effort to earn their respect for our credibility and their support in achieving necessary legislative relief to ensure the continuance of a free enterprise health care delivery system. Accepting the principle that no one is going to tell your story if you don't tell it, or if you don't respond, the Association embarked on a very ambitious communication and public relations effort. At that time, we recognized individuals on the other side were telling their story, but our story was not being completely or factually told.

The problem was how to get our story across. You and I are health professionals. We know how to diagnose, how to treat, but perhaps we are amateurs in the public relations field. We hired outside professional help and established a Public Relations Department within the FMA. We are starting to get the message across. The message is that we have the best health care system in Florida, and that system, which is basically the free enterprise system of health delivery, is better when not tampered with. This is the message that hopefully, in a subtle way, we're getting across.

**The Author**

*VERNON B. ASTLER, M.D.*

*Dr. Astler practices surgery at Boynton Beach, Florida. A Past President of both the Florida Medical Association and the Florida State Board of Medical Examiners, he is serving this year as FMA Public Relations Officer.*

Since the formation of the Public Relations Department in 1976 as a three-person office, many advances have been made to inform the public of the activities of the Florida Medical Association on a grass roots level while attaining national recognition with the production of two major television documentaries.

Our public relations has been two-fold. First, communication within our own medical community is essential to insure that our organization is moving forward to meet the challenges facing our profession. Liaison and communications between the Florida Medical Association and its component societies has maintained a prominent place in the Association's priorities. In addition, a standing committee of the Board of Governors on County Medical Societies serves as a direct liaison between the FMA and its component societies and individual members. The FMA also established field offices in south and central Florida and expanded its Capital office in Tallahassee. The purpose of these offices is to augment and assist county medical societies with programs and activities.

The use of material by the media throughout the State has continued to grow, indicating that we have found the right channels and presentation for utilization of FMA material on a consistent basis.

In January and October of 1977, major television outlets broadcast dramatic presentations of quality medical care and practical preventive medicine to thousands of Floridians. These documentaries, showing many aspects of medical care seldom seen by the public, was part of the continuing image development and outreach of your Association.

The first film, "A Matter of Life . . .", and the second film, "It's Your Life" have demonstrated what can be accomplished by the use of the high impact public relations item. The unique value of these films in penetrating public consciousness is demonstrated by survey findings. The FMA film productions continue to be unique specials for use in television in the years ahead; as well as the many additional uses by schools, civic groups, hospitals, etc.

Over 100 civic groups, schools, universities, hospitals, churches and others have used the two films for their organizations. They have been shown in a number of states at national medical meetings and to numerous lay professional groups.

Forty percent of the stations in Florida are now using our five-minute Medical Message program. In response to many requests, we have added a one-minute message, which is being well received. We are now planning adaptation for publication of some of these in Spanish for areas of the State where Spanish-speaking people are heavily located. We also have plans for a beeper network to beam instantly major comments when a timely news story concerning a medical matter breaks in the State. You and I may not look at too much television, but we're a minority—most Floridians do. The key to breaking into television is quality—quality and contacts. Last year we showed 30-second public service spots which contained a strong message in behalf of our profession. These spots with pro-health information have run free on all major stations in Florida, and if we added up the total commercial time, we would be talking about over $600,000.

We learned early that newspapers are hungry for basic health news. A recent survey showed 80% of the readers polled looked for and read basic health hints. The FMA's Medical Message column, which is now sponsored by 37 county medical societies, and which deals with health topics of general interest, is now being presented in 172 weekly and daily newspapers throughout the State.

News releases produced weekly continue to generate a great deal of interest on the local level, and are being utilized with increasing frequency. During any given week, FMA releases can be seen in about 50 publications, half of which use the material on a regular basis. Hospital newsletter editors and editors of company publications have been added to our mailing list this year. A true barometer of the usage can be seen in the releases dealing with "It's Your Life . . ." promotion. The material appeared in print, free of charge, in every area of the State, including Dade, Duval, Orange and Hillsborough counties. In most cases, the material received excellent play, rather than use as a filler. Continual flow of weekly news releases is obtaining high column inches.

The FMA Speakers Bureau, headed by Edward R. Annis, M.D., has demonstrated the positive value of this concept. Initial response has been superb, and we are penetrating the hard-to-reach leadership market.

Following the initial mailing of material announcing the availability of speakers from the FMA Speaker's Bureau, the FMA has received many requests for the services of Dr. Annis and other members of the Speaker's Bureau.

We've taken the public relations effort out of the defensive posture and we've taken it to the offensive. We are reaching out daily to remind the public what our profession is accomplishing in their behalf.

In the last analysis, the public relations program is only one part of our total commitment-to insure that the delivery of medical care be left in the hands of qualified physicians. This is the message and this is the theme which your public relations program is building. In many ways, the response indicated clearly that we are winning where it counts—with the people we serve.

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**You can't learn anything new from people who always agree with you.**

# Ad Hoc Committees of the Board of Governors

Luis M. Perez, M.D.

In the FMA organizational scheme, there are several boards and committees that report directly to the Board of Governors rather than to one of the seven councils. This article will discuss three of them: the Committee on Allied Health Professions; the Committee on Voluntary Health Agencies; and the Committee on County Medical Societies.

They share a common role of facilitating and encouraging the flow of information from the grass roots of the health care system. It would be difficult to overemphasize the importance of these three committees to the physicians and in fact to all the citizens of Florida.

### Committee on Allied Health Professions

The mandate to the Committee on Allied Health Professions, chaired by Luis M. Perez, M.D., of Sanford, is to maintain liaison and open communications among all of the paramedical forces within the health delivery system. The Committee is concerned with elements closely related to medicine such as the nurses and the physician's assistants as well as those less directly related such as the veterinarians.

It is obvious that the ranks of this Committee, encompassing all of the components of the health care team, represents the largest number of people with common grounds than any other committee of the FMA. In their periodic committee meetings, common interests are identified and goals are established; differences are brought into the open and agreements are reached; solutions are suggested; and, when nothing else is possible, at least calm and impartial evaluation and counseling are offered to the different groups. Through this, a unity of purpose is assured for the betterment of health care and further strengthening of the organization.

At a time when socialization is seriously considered as an alternative to the free enterprise system by demagogues in Washington and in the various state governments, the importance of keeping the members of this Committee together and working toward the common goals is certainly no trivial matter.

### Committee on Voluntary Health Agencies

The Committee on Voluntary Health Agencies is important to FMA for similar reasons. For many years the FMA has maintained official relationships with many of the larger voluntary health agencies through a "recognition" program. The current Chairman of the Committee is Robert C. Palmer, M.D., of Pensacola.

Voluntary Health Agencies generally are found only in the United States although a few organizations such as the Heart Association and the Cancer Society have expanded to foreign lands. Each organization is dedicated to reducing morbidity and mortality from a particular disease or family of diseases. Characteristically, each includes dedicated volunteers from virtually every walk of life. Dedicated and sincere physicians participate in these activities also.

The valuable contributions these organizations make to health care have long been recognized by the medical profession. The Florida Medical Association, through the Committee on Voluntary Health Agencies, maintains liaison and serves in an advisory capacity to those voluntary agencies that meet specific criteria for recognition by the Board of Governors.

In a JFMA article in 1973, Robert E. Windom, M.D., Guest Editor of this issue of *The Journal* and at that time Chairman of the Council on Voluntary Health Agencies, called the agencies "our greatest allies." Dr. Windom's description was appropriate for every year, in a most unselfish manner, these agencies pour millions of dollars

**The Author**

*LUIS M. PEREZ, M.D.*

*Dr. Perez received his M.D. degree at the University of Havana and practices cardiology and internal medicine in Sanford, Florida. He is a past recipient of the A. H. Robins Award for Outstanding Community Service by a Physician (1971) and the AMA's Benjamin Rush Award (1977). Doctor Perez is Chairman of the FMA Committee on Allied Health Professions.*

into the health care system for patient care and comfort, research, and professional and lay education.

Large numbers of educational programs organized and directed by these agencies are a direct input to the general public. Indeed, their constant striving toward excellence through a quasi professional education is one of the strongest pillars in our constant efforts to improve health care; and provides a better understanding of the prevention and early management of disease.

### Committee on County Medical Societies

The youngest of the three committees discussed in this article is the Committee on County Medical Societies, chaired by John W. Hendrix, M.D., of Port St. Joe. Originally called the Committee on County Medical Society Presidents, this group is in charge of improving liaison between the Association and the officers of the component medical societies.

A fundamental part of its role is to advise the FMA leadership as to the program for the annual Florida Medical Association Leadership Conference, which was once known as the County Medical Society Presidents and Secretaries Conference.

Usually conducted in January, this Conference is directed to give orientation and unity of purpose to the entire medical community effort for the coming year.

The Committee on County Medical Societies is in fact the most direct line between the FMA Board of Governors and the component medical societies. It brings to the Board the thinking from different sections of the State; the local problems and concerns; the constructive reactions and possible solutions in a variety of versions.

The work of maintaining and coordinating the general direction of the Association at the local level is not simple. The Committee has to achieve this and at the same time preserve the autonomous nature of the local societies.

As the reader can appreciate by this brief description of the functions of these three Committees, they are part of the "backbone" of the Association. The members who are willing to serve on them volunteer many hours of work to fulfill their mandates. Their efforts have the dual effect of strengthening the Association and helping in the coordination of the best medical care to the people of this State.

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**A stone thrown at the right time is better than gold given at the wrong time.**

**Persian Proverb**

# Ad Hoc Committee to the State Board of Medical Examiners

Vernon B. Astler, M.D.

The Florida Medical Association through the years has cooperated with and attempted to assist where possible the Florida State Board of Medical Examiners. The Board is the state agency responsible under Florida Law for licensing physicians and disciplining those who violate the Medical Practice Act.

With more than 14,000 physicians licensed in Florida and with hundreds of applicants for licensure annually, the job of the Board of Medical Examiners has become awesome.

The FMA has consistently taken the position that maximum available resources from the State and the time and efforts of FMA members should be used to assist and complement the efforts of the Board. The concern for the efficient and effective operation of the Board of Medical Examiners has been manifested by the Board of Governors' creation of a special committee to review the activities and procedures of the Board of Medical Examiners.

During the last two years the work of the Ad Hoc Committee to the State Board of Medical Examiners has resulted in numerous suggestions, both in procedure and suggested amendments to the Medical Practice Act. Through this Committee, the Board of Governors has maintained a close and healthy liaison with the Board of Medical Examiners. This relationship has made for dramatic improvement in communications with the membership of the Florida Medical Association relative to the activities of the Board of Medical Examiners.

It is expected that this Committee will continue its active involvement in the liaison process with the Board of Medical Examiners in order to continue to provide organized medicine's input.

Under the Sunset Law, the Legislature this year will be reviewing all state occupational and professional licensing boards. The Ad Hoc Committee has been working on suggested changes to the Medical Practice Act that can be combined with proposals from the Board of Medical Examiners. It is hoped that the proposals can be presented to the Legislature and supported by both the Board of Medical Examiners and the FMA.

There is no question that the activities of the Ad Hoc Committee are extremely important to FMA members. With the ever increasing public scrutiny given to all activities of physicians, it becomes important that the Board of Medical Examiners function in an independent and objective environment. Moreover, with the increase in the number of physicians licensed in the State, it is probable that the Board of Medical Examiners' disciplinary workload will increase.

Disciplinary activities must be carried out in a judicious and fair environment in order to protect the rights of individual physicians and to insure that the intent of the law is carried out.

This obviously can be done only if the Board of Medical Examiners is equipped with the necessary professional staff and receives the support from all facets of organized medicine. It will be the continuing role of the Ad Hoc Committee to bring to the attention of the Board of Governors the on-going importance of the role played by the Board of Medical Examiners as it relates to the membership of the Florida Medical Association.

**The Author**

*VERNON B. ASTLER, M.D.*

*Dr. Astler, a Past President of the Florida Medical Association and formerly a member of the Florida Board of Medical Examiners, is a general surgeon at Boynton Beach, Florida. He is a member of the Board of Governors' Ad Hoc Committee to the State Board of Medical Examiners.*

# Florida Medical Association Publications

Clyde M. Collins, M.D.

All FMA members are familiar with *The Journal of the Florida Medical Association*, which as a $100,000-a-year operation is the Association's principal publication.

But several other publications prepared at the FMA Headquarters also are big business and involve many members of the full time staff. Ranging from a single page to thick manuals which are mailed to predetermined categories of members, they serve as a means of communication from FMA officers and the various councils and committees, and are an important part of the services rendered to FMA members.

### The President's Memo

Recently, FMA President O. William Davenport, M.D., wishing to appeal to those FMA members not belonging to the American Medical Association, composed a letter, had it typed and then reproduced. From the computer in the Jacksonville office the names of those non-AMA members were obtained, and within 24 hours an issue of "The President's Memo" was in the mail.

### The Gray Paper

"The Gray Paper," a bulletin from the Executive Vice President's office, can also be prepared and mailed the same day. It is of limited circulation, going to FMA officers, council and committee chairmen, and county medical society presidents, secretaries and executives. It includes such topics as the recent Leadership Conference and is mailed out whenever there is need for rapid dissemination of information.

**The Author**

*CLYDE M. COLLINS, M.D.*
*Dr. Collins is a general surgeon in Jacksonville, Florida. A Past President of the Duval County Medical Society, he is an Associate Editor of* ***The Journal.***

### The Briefs

Another sporadic publication is "The Briefs," sent out to the entire membership to bring attention to important matters on such subjects as socioeconomics, official policies, or items of local or state interest. This is used when the entire membership must be notified of some subject on short notice.

### The Legislative Bulletin

The "Legislative Bulletin" is prepared by the Council on Legislation and Regulations and the Committee on State Legislation with the help of the FMA staff in both Tallahassee and Jacksonville. It has a limited distribution of about 500, going to all who receive the "Gray Paper," plus members of state and county committees on legislation, FMA Auxiliary officers, key contact physicians, and directors of the Florida Medical Political Action Committee.

The "Legislative Bulletin" is published every Friday during sessions of the Florida Legislature and as developments warrant at other times during the year.

### Florida Medical Opportunities Bulletin

Four times a year "The Florida Medical Opportunities Bulletin" is published by the FMA Physician Placement Service. It lists available opportunities for practice within the State. Some 1,500 requests for this Bulletin are received in the Jacksonville office every quarter.

Inquiries come from all over the United States and occasionally from Latin America. It also is a service for FMA members seeking partners or associates or wishing to sell their practices. Listed are practice opportunities in hospitals, state facilities and local communities.

### The Florida Medical Directory

"The Florida Medical Directory" is published annually and lists physicians alphabetically by county medical society and alphabetically statewide. Also included are a list of Florida hospitals; a directory of FMA-recognized voluntary health agencies; hospital directors of medical education; poison control centers; officers of component medical societies and FMA-recognized state specialty groups; State Board of Medical Examiners; and sources of snake antivenin, as well as a summary of the major provisions of the Medical Practice Act.

Each member gets one copy of the "Directory" free of charge each year. The 1979 edition of the "Directory" was distributed last month.

### CME Courses

Another publication of importance is "CME Courses Approved by the FMA," produced by the Committee on Continuing Medical Education. A basic list of CME activities approved for Mandatory Credit is published three times a year with monthly supplements produced in intervening months.

Distribution is to county medical societies and individuals who request copies.

### Relative Value Studies

Probably requiring more time volunteered by physicians and more work by the fulltime staff has been the "FMA Relative Value Studies." The first one was published in 1962 under the leadership of Fred A. Butler, M.D. It was followed by revisions in 1968 and 1971.

The relative value concept was developed from the California Medical Association, and includes four elements in the overall objective: uniform nomenclature; standardized code system; relative values; and correct segmentation. This was begun in 1956 by physicians recognizing the need for a guide or rule of thumb measurement which could be used to improve fee schedules.

Many loyal FMA members serving on the Committee on Relative Value Studies spend hours and days discussing this most difficult assignment. By 1975, the Relative Value Studies Committee with Charles Donegan, M.D., as Chairman, aware that revision was inevitable due to a flood of new procedures, worked under the hope of maintaining relativity for new and established procedures. Believing reliable relative values, now called unit values, could be determined only by a survey, the Committee prepared 22 questionnaires covering 393 procedures and sent them to over 10,000 FMA physicians before compiling the book.

### Summary

Publication in my Webster's is defined as "communication of news and information or the printing and distribution of technical journals." The FMA membership is well served by its dedicated fulltime staff and all the physicians who volunteer their time and talent to assist in producing the many in-house publications.

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# The Art of Being Gracious

**Everyone would like to be a gracious person. Graciousness is a precious attribute of most of the things we yearn for — admiration, respect, love and happiness. It is a mistake to think that one is born with this attribute. It is an acquired trait, as readily acquired as good manners, which constitute a very important part of it. But unlike most arts one does not need to have a special talent for it. Only the sincere desire to be gracious — plus thoughtfulness and practice — are required.**

**The key to the art is the Golden Rule — applied so consistently that it becomes natural. It is a matter of treating others the way you would like to be treated — not because it is the diplomatic thing to do but because you want to treat them that way.**

**The art of being gracious is developed by doing kind things — and sometimes difficult things — in the kindest way, until such behavior becomes characteristic for you. And how rewarding such a grace can be! Wordsworth declared that such little, nameless, unremembered acts of kindness add up to the best portion of a good man's life.**

# The FMA Placement Service

J. Lee Dockery, M.D.

Over the past two decades the Florida Medical Association has operated a Physicians' Placement Service, free of charge, for members of the Florida Medical Association seeking partners, associates, or purchasers for their practices.

Primarily, this is accomplished through publication, on a quarterly basis, of the "Florida Medical Opportunities Bulletin" which lists all of the available opportunities placed by the members of the Association. In addition, practice opportunities sponsored by hospitals, government facilities and responsible community groups may be listed in the bulletin. Included in the publication is a listing of component county medical societies, state agencies, and Florida Medical Association recognized specialty groups.

In 1978 the placement service received over 2,500 inquiries which included correspondence, telephone calls, and actual visits to the FMA office.

As of November 20, 1978, there were 224 physicians registered with the Placement Service as actively seeking practice locations. Also, there were 71 practice opportunities listed throughout the State.

Of the physicians registered, Internists are the largest group (49), followed by Family Practitioners and General Practitioners (26), and General Surgeons (26).

The most acute need for physicians continues to be in Family or General practice with 39 openings.

**The Author**

*J. LEE DOCKERY, M.D.*

*Dr. Dockery is Associate Professor of Obstetrics and Gynecology and Associate Dean for Academic Affairs at the University of Florida College of Medicine, Gainesville. He is a former Vice President of the Florida Medical Association and at present is a member of the FMA Board of Governors.*

**TABLE I**

**Available Physicians and Practice Opportunities Listed with FMA Physicians' Placement Services November 20, 1978**

| SPECIALTY | PHYSICIANS | OPPORTUNITIES |
|---|---|---|
| Abdominal Surgery | 1 | 0 |
| Allergy | 5 | 1 |
| Anesthesiology | 16 | 0 |
| Cardiology | 13 | 1 |
| Cardiovascular Surgery | 3 | 0 |
| Colon/Rectal Surgery | 0 | 0 |
| Dermatology | 1 | 0 |
| Emergency Medicine | 7 | 2 |
| Endocrinology | 1 | 1 |
| Family Practice | 8 | 29 |
| Gastroenterology | 7 | 0 |
| General Practice | 18 | 10 |
| General Surgery | 26 | 1 |
| Hand Surgery | 1 | 0 |
| Hematology | 3 | 0 |
| Internal Medicine | 36 | 11 |
| Institutional/Governmental | 0 | 0 |
| Nephrology | 2 | 1 |
| Neurology | 3 | 1 |
| Neurosurgery | 0 | 0 |
| Obstetrics/Gynecology | 13 | 2 |
| Oncology | 2 | 1 |
| Ophthalmology | 5 | 2 |
| Orthopedic Surgery | 8 | 1 |
| Otolaryngology | 2 | 0 |
| Pathology | 6 | 0 |
| Pediatrics | 14 | 3 |
| Pediatric Cardiology | 1 | 0 |
| Pediatric Surgery | 0 | 0 |
| Plastic Surgery | 0 | 0 |
| Psychiatry | 7 | 2 |
| Public Health | 0 | 0 |
| Pulmonary Disease | 2 | 0 |
| Radiology | 5 | 0 |
| Rheumatology | 2 | 0 |
| Thoracic Surgery | 4 | 0 |
| Urological Surgery | 2 | 2 |
| TOTALS | 224 | 71 |

In analyzing the data of the Physicians' Placement Service, it will be noted that the number of such listings changes seasonally and even day to day.

Those persons who wish to advertise practice opportunities in the "Florida Medical Opportunity Bulletin" should write a concise description of the available position. Be sure to include:

QUALIFICATIONS DESIRED: (Board Certified or Eligible, etc.)

DESCRIPTION OF PRACTICE: (Solo, group, size, office facilities, etc.)

RESPONSIBILITIES, NIGHT-WEEKEND COVERAGE

FINANCIAL ARRANGEMENTS, FRINGE BENEFITS

HOSPITAL FACILITIES

COMMUNITY INFORMATION: (Location, population, climate, industry, schools, and recreational facilities).

Physicians who are looking for positions should provide the following biographical information:

NAME, ADDRESS AND TELEPHONE NUMBER

FIELD OF PRACTICE, SUB SPECIALTY

TRAINING, MEDICAL SCHOOL AND LICENSE

SIZE OF COMMUNITY AND TYPE OF PRACTICE PREFERRED

DATE AVAILABLE

The placement service does not have the resources for investigations of applicants or openings. For further information please contact: Florida Medical Association, Inc., Physician Placement Service, P. O. Box 2411, Jacksonville, Fla. 32203, Telephone: (904) 356-1571.

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# Make the Most of Your Blessings

**Helen Keller, who died at eighty-eight, lost both her sight and hearing as the result of an illness when she was nineteen months old. She left us a legacy of courage and wisdom. She demonstrated, through her books and lectures, that it is not what one loses but what he has left that counts.**

**"I who am blind can give a hint to those who see," she wrote. "Use your eyes as if tomorrow you would be stricken blind. And the same method can be applied to the other senses. Hear the music of voices, the song of a bird, the mighty strains of an orchestra, as if you would be stricken deaf tomorrow. Touch each object as if tomorrow your tactile sense would fail. Smell the perfume of flowers, taste with relish, as if tomorrow you could never smell and taste again.**

**"Make the most of every sense; glory in all facets of pleasure and beauty which the world reveals to you through the several means of contact which nature provides. But of all the senses, I am sure that sight must be the most delightful. Use your eyes as never before!"**

# Emergency Medical Services

Roy M. Baker, M.D.

As recently as 10 years ago Emergency Medical Service Systems did not even exist in the State of Florida. Previously, an ambulance was merely a rapid surface transportation unit without any systems approach. Ambulances usually were operated by funeral homes which fought each other over who would get the bodies rather than saving lives.

These ambulances were usually manned by untrained personnel and seldom carried any medical equipment, and they certainly did not have today's sophisticated communications systems that provide instant expert medical advice and the advantage of telemetry.

In today's modern systems approach to pre-hospital care a new breed of medical subspecialty has surfaced, namely the fulltime Emergency Room Physician. Originally, these physicians were second career "Doc's" who learned their trade on the job. The traditional specialists in the care of critical patients continued to work hand in hand with the emergency staff (MD's, nurses, technicians) in backing up the constant front-line. The emergency room now has become an emergency *department* with trained primary emergency care physicians in place. New and enlarged emergency departments are now the rule rather than the exception, and increased staffs, equipment and hospital dollars are apparent. Today's advanced life support technology is part and parcel of daily medicine.

## Emergency Department Visits

Seventy million citizens now visit the emergency departments across this country each year. Since emergency rooms are open 24 hours per day, patients look to these areas more and more and not only for critical care needs but as a place to obtain routine community health needs. It is estimated that only 15% of the patient flow has an acute medical emergency problem, with 5% of these having life threatening injuries or illness. For every 10,000 citizens one emergency is produced every 24 hours.

In 1970, the Florida Medical Association's old Medical Disaster Committee became the Committee of Emergency Medical Service and Medical Telecommunication. The reconstructed committee dedicated itself to developing new and innovative approaches to delivering emergency care. The Committee was instrumental in drafting and obtaining FMA support for the 1973 Emergency Medical Services Act which is now considered landmark state legislation and has served as a model for other states.

In 1976, the Committee proposed an amendment which again was supported by the FMA and adopted by the Legislature. The amendment modified the 1973 EMS Act in three important areas: (1) defining advance life support standards; (2) providing for certification of "paramedics" and developing education requirements; and (3) mandating that any advanced life support system must have a Medical Director who is a Florida licensed physician.

## EMS Conference

In March 1977, the committee planned and conducted a FMA-sponsored conference for EMS Medical Directors. The purpose of the meeting was to explain and help implement the new amendment to the EMS Act. More than 200 physicians attended this informative meeting and clearly demonstrated that doctors are the catalyst in local communities for establishing or upgrading emergency care.

In just a few short years we now have in Florida several hundred "certified" rescue vehicles and the vast majority have two-way communications. Twenty-three junior colleges have trained over 15,000 Emergency Medical Technicians. The Director of the EMS Section of the Department of Health and Rehabilitation Services is a physician and we now have a law mandating local EMS advanced life support systems must have a medical supervisor. These accomplishments encountered many problems and solving one problem frequently created

**The Author**

*ROY M. BAKER, M.D.*

*Dr. Baker is a cardiologist in Jacksonville, Florida. He is Chairman of the FMA Committee on Emergency Medical Service and Medical Telecommunication.*

another. The Florida Medical Association can take pride in its contribution to these amazing advances in pre-hospital care; nevertheless, all of this is really just the beginning.

### Needs and Standards

In September 1976, the Committee on EMS conducted through the Florida Medical Foundation with the assistance of a grant from the Department of HRS, a conference on the identification of needs and standards for in-hospital critical care. This unique multidisciplinary meeting attempted to address for the first time in Florida the merits of having a statewide critical care system. Many vital questions and philosophies have yet to be answered regarding this subject. Problems involved in such an endeavor are obviously gigantic. Any such system must safe-guard the normal and traditional referral patterns of patients by physicians and at the same time provide easy entry and optional care for every critical care patient in Florida.

Other factors for consideration include cost containment and perspective data regarding mortality and morbidity. As part of its continuing study, the Committee on the EMS in cooperation with the Florida Hospital Association and the EMS Section of the Department of HRS is presently conducting a survey to determine the availability of emergency, critical care and other highly specialized services.

### Missing Link

After 10 years of experience in the pre-hospital phase of emergency medical care we have discovered a missing link as it is now evident that additional lives can be saved by someone performing basic life support techniques (CPR) until medical personnel arrive on the scene. Currently the EMS Committee is working with the American Heart Association, the American Red Cross, the Department of HRS, and Florida Jaycees in a program to train 10% of the State's population in CPR. Ten years ago this would have been unthinkable. Constant education of all physicians in basic life support skills has been encouraged by the FMA and is now required for approval of staff privileges in many hospitals.

### Emergency Telephone Act

In 1974 the Florida Legislature enacted the Emergency Telephone Act. This legislation deals with the statewide implementation of the universal emergency telephone number 9-1-1 and is the most comprehensive yet enacted in the nation.

The future of EMS is unlimited and the state of the art is constantly changing. The Board of Governors continues to designate this subject as a major FMA priority and their challenge must not go unanswered.

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**How seldom we weigh our neighbor in the same balance with ourselves. — Thomas A. Kempis**

# The Florida Medical Association Auxiliary

**Mrs. Thomas Byron Thames**

The Florida Medical Association Auxiliary, Inc. was organized in 1926. The objects are to assist the Florida Medical Association, Inc., in its programs for the advancement of medicine and public health; to coordinate and advise concerning the activities of chartered component auxiliaries; to promote health education; to receive and disburse gifts for the promotion of the objects and purposes of the corporation.

The state officers and chairmen of the Auxiliary serve as the advisory and coordinating body of the component county auxiliaries, and the national officers and chairmen serve the same function for the component state auxiliaries, with much the same organization as the American Medical Association and its component state associations.

Some of the projects approved by the Florida Medical Association and carried out successfully by the county and state auxiliaries are:

The Art Show at FMA annual meetings started with the display of physicians' talents only but has been extended to include the whole family. Proceeds benefit the American Medical Association Educational Research Foundation (AMA-ERF). Contributions doctors make to their alma maters can increase our total if made through the county AMA-ERF Chairman. It does not cost a penny more and the physician still gets full credit and acknowledgement from the medical school. Florida's contributions through county holiday sharing cards, alma mater gifts, memorial and "thinking of you" cards placed us first in the South and fourth in the nation.

The Florida Medical Foundation is a tax-exempt organization established by the FMA to provide funds for medical education and to provide relief for needy physicians and their families when necessary. The state Auxiliary has special projects to raise funds for this purpose. Citrus and seafood sales, cookbook sales and the successful INTRAV foreign medical seminars benefit the FMF yearly.

Counties donate hand made items for the FMA Auxiliary Fall Conference Bazaar, have international luncheons and dinners, white elephant sales, and holiday bazaars which benefit international health. These monies are divided between the Medical Assistance Program, Scholarships for Kids of International Physicians (SKIP), and Interplast East, Inc. Medical Assistance Programs provide medicine and supplies to mission hospitals; SKIP helps send the children of a rural physician in India back to civilization for schooling; the Interplast East provides plastic surgery for victims of birth defects, accidents and burns in Central and Latin America.

Legislation continues to be an important part of the Auxiliary's program. We work actively to promote the passage or defeat of certain legislation deemed beneficial or detrimental to medicine. "Day in the Legislature" has expanded to two days. Members get a tour of the Capitol building, visit the FMA Capital Office and attend sessions. Auxiliary members in attendance invite their hometown lawmakers to dinner. At the request of the FMA Executive Committee the Auxiliary has composed a brochure on the physician's responsibility in reporting child abuse and a brochure for service organizations stating ways they can assist in lending help in child abuse. As soon as the brochures are reviewed and approved by the FMA committee and FMA legal counsel they will be printed and distributed.

We sponsor a statewide Conference on Health Education in alternate years for educators, leaders in medical and health professions and other health involved agencies. This conference provides the opportunity to learn of current programs, resources and materials available, as well as those which overlap or are still needed.

Many counties are involved in the American Medical Association immunization awareness campaign. They are painting colorful hopscotch courts with the names of the vaccine-preventable childhood diseases on school

**The Author**

*MRS. THOMAS BYRON THAMES*

*Mrs. Thames (Pat) is President of the Florida Medical Auxiliary and resides at Orlando, Florida. Her husband is a member of the Board of Governors of the Florida Medical Association.*

playgrounds and one county put it on the floor of the Museum of Art. They have innovative TV and radio announcements, and provide immunization coloring sheets to day care centers and nursery schools. Posters are displayed in day care centers, schools and shopping centers.

Community service in blood donor; mental health programs; meals-on-wheels; health career fairs; health clinics; health events for children of migrant workers; breast self-examination; cardiac pulmonary resuscitation courses for auxilians, high school students and the general public; child abuse, safety on streets; and health testing are carried out across the state.

This is only a partial list of the varied activities performed by the Auxiliary. Counties survey the needs of the community and then strive to fill those needs. It is suggested, when feasible, to cooperate with other community agencies or organizations with common interests and goals. And always, it is stressed that the auxiliaries must work in cooperation with and full approval of their corresponding medical association.

The FMA Auxiliary is proud of its fifty plus years of service not only to their physician spouses but to medicine and to all the citizens of Florida.

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**OFF TO AN EARLY START . . .**

***THIRTEENTH ANNUAL AUXILIARY BENEFIT ART SHOW***

**SHOW TIME — MAY 1979 — WILL SOON BE HERE!**
**PLEASE PLAN NOW TO ENTER**
**EVERYONE IS WELCOME — DOCTORS, WIVES AND CHILDREN**
**YOU MAY HAVE MORE TALENT THAN YOU REALIZE**
**THERE WILL BE AWARDS IN:**

1. **PAINTING — oil, acrylic, casein, collage, watercolor, pastel, etc.**
2. **GRAPHICS — pen and ink, charcoal, photography, etc.**
3. **CRAFTS — sculpture, pottery, ceramics, mosaic, weaving, jewelry, etc.**

**THERE WILL BE AN ENTIRELY SEPARATE AWARD — CHOSEN BY A SPECIAL COMMITTEE — "THE EDITOR'S AWARD." THE WINNING WORK OF THIS SPECIAL AWARD WILL BE USED ON THE COVER OF A FUTURE ISSUE OF THE FMA JOURNAL.**

**IF YOU HAVE ANY QUESTIONS PLEASE CONTACT MRS. JAMES D. MOODY, SHOW CHAIRMAN, 4584 Lake Holden Hills Drive, Orlando, Florida 32809.**

# The Florida Medical Foundation

Eugene G. Peek Jr., M.D.

The Florida Medical Foundation is a nonprofit organization established by the Florida Medical Association in 1956. The Foundation was organized and operates exclusively for charitable, scientific, and educational purposes. The Foundation's first President was Dr. Edward Jelks.

The Foundation has as its primary purpose the improvement of the health and medical care of the people of Florida. The major objectives established are: (1) sponsorship of graduate and postgraduate medical education without preference for any person; (2) providing financial charitable assistance to persons of Florida who are pursuing an education in medicine; (3) promoting and sponsoring medical research exclusively for public purposes and benefits; and (4) assisting deserving indigent or destitute physicians who by reason of illness or physical incapacity need charitable assistance.

The affairs of the Foundation are managed by its Board of Directors which is composed of five members appointed by the Board of Governors of the FMA. Four are members of the Board of Governors of FMA. Current officers and directors are: Eugene G. Peek Jr., M.D., Ocala, President; Donald G. Nikolaus, M.D., Dunedin, Thomas B. Thames, M.D., Orlando, and J. Lee Dockery, M.D., Gainesville, Vice Presidents; and W. Harold Parham, D.H.A., Jacksonville, Secretary-Treasurer and Executive Vice President. The Board of Directors authorizes or approves all disbursements from the assets of the Foundation and no disbursements are authorized except for purposes outlined in the Charter.

**The Author**

*EUGENE G. PEEK JR., M.D.*

*Dr. Peek is a family practitioner and general surgeon at Ocala, Florida. He is President of the Florida Medical Foundation and is an Advisory Member of the FMA Board of Governors representing the Department of Health and Rehabilitative Services.*

## Medical Education

The Foundation's Medical Education Committee has been accredited for continuing medical education by the American Medical Association. With this sanction, the Committee has launched a program of working with county medical societies, FMA-recognized voluntary health agencies and specialty groups, hospitals, and other medical groups in the co-sponsorship of continuing medical education activities. The Committee is authorized to certify, where appropriate, that the CME programs it co-sponsors meet the criteria for American Medical Association Category I Credit.

The Medical Education Committee also has established a registry of scientific speakers. This service is available free of charge to county medical societies, hospitals and other sponsors of continuing medical education as an aid in designing quality CME programs.

## Peer Review

One of the most beneficial educational programs conducted by the Foundation is Peer Medical Utilization Review (PMUR). The primary purpose of this program is to extend medical knowledge and evaluate the standards of medical care. Peer review is necessary for the continuing monitoring of medical care offered in Florida. It is essential that such monitoring be done by members of the medical profession who in actuality are the only ones qualified and capable of evaluating quality medical care. This activity is supported by contracts between the Foundation and the Medicare fiscal intermediaries in Florida, and most recently between the Foundation and the Florida Department of Health and Rehabilitative Services, the Medicaid fiscal administrator.

## Medical Research

The Foundation has continued its efforts to promote and sponsor medical research exclusively for public benefit and has, since September, 1961, funded 19 research grants totaling in excess of $98,000. These grants have covered such topics as *Chemical Composition of the Lipids of Muscle in Patients with Muscular Dystrophy; Renal Perfusion; Study of a Negro Family Demonstrating Familial Hypophosphatemia; The Physiology of Cardiopulmonary Bypass; Quantitative Assessment of Lung Damage; Experimental Use of Silicone Rods;* and many others. Each year the Foundation receives numerous applications for research grants, which are placed on a waiting list because of limited funds.

## Trust Funds

A Trust Agreement with the Florida National Bank of Jacksonville was executed in February 1958 and has several divisions. Trust Funds have been set up for the Dade County Medical Association (1957), the Florida Academy of General Practice (1959), the Medical Center Clinic of Pensacola (1961), the Florida Association of Industrial and Railway Surgeons (1963), the Palm Beach County Medical Society (1965), and the Florida Association of General Surgeons (1970), to administer medical student and intern and resident loans.

Agreements are in effect with the Florida State Board of Health for research and development programs (1959), the Tampa General Hospital Medical Staff for education and research (1961) the Marion County Medical Society (1965), and the Volusia County Medical Society (1966) for aid to needy physicians and their families; with the Woman's Auxiliary to the FMA (1971) and the Central Florida Medical Research and Education Foundation, Inc. (1965). To date, 116 students have received financial assistance as a result of the Foundation's loan program.

## Indigent Physicians

Providing aid to deserving indigent or destitute physicians has long been a major concern to the Foundation. Through this worthy program, financial aid is provided to indigent or destitute physicians, who by reason of illness or mental or physical incapacity, need charitable assistance.

## Contributions

To carry out its objectives, the Foundation must rely on individual contributions. These contributions are tax deductible and may be designated for specific programs. Since 1977, the Foundation has made available a limited number of registered prints of Lee Adams' *Caduceus* as a method of raising funds to support the many programs of the Foundation. Some of these prints are still available for a tax-exempt donation of $300.

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**I have never let my schooling interfere with my education. — Mark Twain**

# The Florida Physicians Association

**David T. Overbey, M.D.**

The Florida Physicians Association traces its beginnings to 1971, when the Escambia County Medical Society introduced in the FMA House of Delegates Resolution 71-4 (Corporation for Physicians' Negotiations).

Resolution 71-4 called for creation of a separate organization "to negotiate for and in the interest of Florida physicians individually and collectively." It was not adopted but was referred to the Board of Governors for further study.

During the ensuing year an ad hoc committee headed by former FMA President James T. Cook Jr., M.D., conducted studies. The House of Delegates, in 1972, approved a Board of Governors recommendation that Resolution 71-4 "be approved in principle" and directed that "FMA organize and sponsor a corporation dedicated to the private practice of medicine in Florida."

The action named the new organization the "Florida Physicians Association, Inc." and set forth these purposes and functions:

—Actively pursue a program to preserve the professional and economic independence of its members.

—To advance, further and protect the welfare of patients and physicians in private medical practice and to preserve the integrity of their relationship.

—To assert the physicians' responsibility and right to assess and determine their individual roles in the practice of medicine as well as their collective interests in the establishment and maintenance of high standards of medical care in the community as a whole.

—To establish such organs, agencies and facilities as may be deemed necessary or desirable to represent and protect the membership as a whole and/or its individual members in transactions and/or relationships with any or all persons, parties, agencies and organizations who are third parties to the patient-physician relationship.

—To take advantage of existing laws that protect organized groups working in concert.

—To promote the socioeconomic welfare of the physician.

—To protect and strengthen the patient-doctor relationship and to serve as an agent in matters involving third parties.

Dr. Cook was elected the organization's first President. In his first report to the House of Delegates in 1973, he announced that FPA had been incorporated under Florida Law the preceding January.

Basically, the organization was set up to undertake activities that the FMA could not do because of charter restrictions, or would not do because of possible legal ramifications. Areas where the FPA might become more active possibly could be to act as a bargaining agent for its members with third parties, including governmental agencies. It might enter into litigation or join with other organizations in litigation.

The FPA is run by a Board of Directors composed of the four officers (President, Vice-President, Secretary and Treasurer); one member from each of the 15 congressional districts elected by the members residing in that district; three appointees of the Board of Governors of the Florida Medical Association; one appointee of the Board of Directors of the Florida Medical Political Action Committee (FLAMPAC); and the Immediate Past President.

An Executive Committee—consisting of the four officers; the Immediate Past President, and three other Board members, two of whom are FMA appointees—oversee business between meetings of the Board of Directors.

FPA has been quietly collecting the annual dues of $15 per member and this has built up over the years to a moderate sized "war chest." If the FPA ever gets into litigation, it can be quite expensive. Therefore, we want to be sure that we have good legal opportunities if we do get into litigation for our members. We would also want to have reasonable hopes of success.

This organization would like to expand its membership to include all members of the Florida Medical Association. The $15 dues are tax deductible. We need your help.

It is our hope that all FPA members as well as all FMA members will work actively and donate freely in the campaigns for office at the local, state and national levels in order to aid those people who will be the friends of organized medicine when elected. The future of our profession is at stake.

**The Author**

*DAVID T. OVERBEY, M.D.*

*Dr. Overbey is a cardiologist in St. Petersburg, Florida. He is President of the Florida Physicians Association.*

# Florida Medical Political Action Committee (FLAMPAC)

**William W. Thompson, M.D.**

*"Those who give up essential liberty to purchase a little temporary safety deserve neither liberty nor safety."*

***— Benjamin Franklin***

The Florida Medical Political Action Committee (FLAMPAC) was established in 1962 as a voluntary, nonprofit, unincorporated committee of individual doctors of medicine and others and is not affiliated with any political party. (It is the successor of the Florida Medical Committee for Better Government formed by Florida physicians in 1950.) The Committee is an independent, autonomous organization and is not a branch or subsidiary of any national or other political action organization.

The objectives of the Committee are fourfold:

First, to promote and strive for the improvement of government by encouraging and stimulating physicians, their spouses, and others to take a more active and effective part in governmental affairs.

Second, to encourage physicians and others to understand the nature and actions of their government, as to important political issues, and as to the records of officeholders and candidates for elective office at all levels of government.

Third, to assist physicians and others in organizing themselves for more effective political action and in carrying out their civic responsibilities.

Fourth, to do any and all things necessary or desirable for the attainment of the objectives stated above.

**The Author**

*WILLIAM W. THOMPSON, M.D.*

*Dr. Thompson is a pediatric allergist at Fort Walton Beach, Florida. A former Chairman of the FMA Judicial Council, he currently serves as Vice President of the Florida Medical Association and President of the Florida Medical Political Action Committee (FLAMPAC)*

In pursuit of these objectives, two key activities were undertaken during 1978. The first activity was the establishment of a viable formal or informal political education program in each community with assistance of the FMA Auxiliary. Not only were these committees established—most with Auxiliary representation—but the majority became immediately functional and assisted greatly in the 1978 elections.

The second major accomplishment was the reorganization of the FLAMPAC Board of Directors and the creation of two new advisory committees. The previous Board of 15 members was reduced to 9 members with one being a representative of the FMA Auxiliary with full voting privileges. The Board depends quite heavily on the deliberations of the newly established Advisory Boards.

The Candidate Advisory Board for National Elections, composed of a medical doctor from each of Florida's 15 congressional districts, advises the Board of Directors on matters relating to national elections, including evaluation of candidates who are seeking national elective office.

The Candidate Advisory Board for State Elections, presently composed of 22 members, performs in state elections the same function as the Candidate Advisory Board for National Elections.

As President of FLAMPAC, I would be remiss in my duties if I did not compliment the cooperative spirit displayed among the Board of Directors, the Advisory Board members, and the physicians and spouses in each medical community. With the establishment of this widespread base of political action we are poised to extend our efforts making FLAMPAC truly a force in national and Florida politics.

# The Florida Health Data Corporation, Inc.

James L. Borland Jr., M.D.

The Florida Health Data Corporation began as an outgrowth of a steering committee of the Florida Medical Association's Council on Medical Systems. This committee was charged by the FMA Board of Governors with the responsibility for developing a statewide peer review system operating within the private sector of health care.

The primary tool needed in developing such a system was access to patient care data. The Committee recognized the need for a consortium between hospitals and physicians to obtain these data. The hospitals also recognized the need for a coordinated effort; thus, a consortium was formed by the Florida Medical Association, the Florida Hospital Association and the Florida Osteopathic Medical Association.

It quickly became apparent that to collect the data required in a systematic fashion, the consortium would need to develop a computerized system for data gathering. To make such a system financially self-sufficient, it would have to be marketed to the hospitals, which would require not only a mechanism for data acquisition but also the capability of providing hospitals and other facilities with the basic management information for licensure, accreditation and internal administration at a competitive price. To accomplish these aims, the Florida Health Data Corporation, Inc. was formed as a non-profit organization owned and operated jointly by the FMA, FHA and FOMA.

For almost two years, the FHDC has been developing a health information program for Florida hospitals. The Inpatient Case Abstract and Utilization Review Programs were tested in a pilot project involving 11 Florida hospitals (chosen to represent 11 PSRO districts) during March, April and May of 1978. As of last November, the FHDC was processing over 68,000 hospital discharges annually, and additional hospitals have joined the program since then. The FHDC has aggressively revised its programs to meet new requirements of the Uniform Hospital Discharge Data set and to include the data elements needed for PSRO reporting. Programs for ambulatory and emergency medical care have been developed, and a program for long term care reporting is under development.

At present, the FHDC has accomplished the significant first step toward satisfying the FMA's desire to establish a statewide peer review system in the private sector: a mechanism for patient care data acquisition and collation. Soon it will be able to provide uniform, coordinated and reliable data for a concurrent review system and be able to make available to the appropriate agencies data needed to ensure sensible health care planning, while preserving the confidentiality of information so important to patients, hospitals and physicians in the State of Florida.

**The Author**

*JAMES L. BORLAND JR., M.D.*

*Dr. Borland is a practicing gastroenterologist in Jacksonville, Florida. He is President of the Florida Health Data Corporation and Chairman of the FMA Council on Medical Systems.*

**The only sure thing about luck is that it will change. — Wilson Mizner**

# The Community Hospital Education Council

Charles J. Kahn, M.D.

The Community Hospital Education Council (CHEC) was formed by an act of the Florida Legislature in 1971. The bill which created it was introduced by Rep. Richard S. Hodes, M.D. of Tampa, and was the brain child of several physicians throughout the State who felt that the educational facilities of the various community hospitals were deserving of state support.

In the first year of its existence, the Council formulated the plans and methods of support of internship and residency programs which are, for the most part, still in effect. In that first year (1972), the Council total funding was $25,000. In the coming fiscal year, the total funding will approach $4 million.

In addition to its financial support to training programs, the Council has conducted several professional surveys of the States' medical facilities, physician population and the medical needs of the people. The Council had also been instrumental in assisting in the founding of several new residency programs.

Kenneth Penrod, Ph.D., had served the Council as its Staff Director since its inception and it is largely through his efforts and expertise that the Council has enjoyed a considerable degree of success while remaining highly cost-effective. The members of the Council serve without pay at the pleasure of the Governor. Its composition has been determined by the establishing act that requires two directors of medical education, one member of the medical staff of a participant hospital, one hospital administrator, one medical school dean and, most recently, two consumer members. These members are representatives of the State as a whole and not of the areas from which they come.

The Council has shown that community hospital training programs can, and do, provide well-trained primary care physicians who are likely to practice in the area in which they are trained. It hopes to continue and expand its programs through the future in order to ensure an adequate and excellent physician population for the needs of the people of Florida.

**The Author**

*CHARLES J. KAHN, M.D.*

*Dr. Kahn practices internal medicine in Pensacola. A former Speaker of the FMA House of Delegates and currently a member of the FMA Board of Governors, Dr. Kahn is Chairman of the Community Hospital Education Council.*

**It is useless for us to attempt to reason a man out of a thing he has never been reasoned into.**

**—Jonathon Swift**

# Florida Task Force on Rheumatic Fever And Rheumatic Heart Disease

Robert E. Windom, M.D.

In 1973 the Florida Task Force on Rheumatic Fever and Rheumatic Heart Disease was established. This resulted from the efforts to bring together representatives from the Department of Health and Rehabilitative Services, the Division of Children's Medical Services, the American Heart Association, Florida Affiliate, the Florida Dental Association, and the Florida Medical Association. Prior to that time each particular group represented had interest and involvement in this area but there was no correlation of respective activities in order to have a significant program for the State of Florida.

The Task Force had several charges, including: (1) Dissemination of information to the public regarding the primary prevention of rheumatic fever; (2) Provision of information to Florida physicians regarding rheumatic fever; (3) Initiation of a computerized registry of rheumatic fever patients to assist in accurate data collection and in monitoring of patient compliance through prophylaxis; and (4) Provision of tests to physicians to help diagnose primary cases of rheumatic fever and in the management of patients with rheumatic fever receiving prophylaxis to prevent secondary a tacks.

We are happy to report that significant progress has been made over the past five years. Some of the accomplishments are:

—The Task Force was instrumental in making rheumatic fever a reportable disease by law.

—A protocol for delabelling of rheumatic fever patients was developed.

A bill passed in the 1974 Legislature allows nurses to administer penicillin in the home, office, or clinic without a physician in attendance but on his order, provided that maximum liability coverage is provided for them.

—The "reporting form" was revised, making easier reporting by physicians.

—The drug form for ordering medication was revised.

—A program to monitor oral penicillin through urine testing was initiated and implemented.

—Through the use of radio and television spots, public education was promoted in the primary prevention of strep throat.

—A mailing was sent to family practitioners, internists and pediatricians reminding them that rheumatic fever is a reportable disease in Florida, and that free rheumatic prophylaxis is available with a recommendation that this be taken for the entire lifetime of the patient.

—Improved liaison was established with public health officers and county medical societies, updating them on the program.

—A survey of hospitals and specific physicians in the State was made regarding "Subacute Bacterial Endocarditis in Florida," and a report was published in the December 1978 issue of *The Journal of the Florida Medical Association.*

—A program was initiated at four elementary schools in the Gainesville area obtaining 2,696 throat cultures in a five-month period from students in the first, second, fifth and sixth grades.

—Informational materials were mailed to dentists and primary physicians by the American Heart Association, Florida Affiliate, for further educational effort.

The most significant achievement to date from the work of the Task Force has been the implementation of a computerized rheumatic fever registry in the Department of HRS, with our statistician located in the Children's Medical Services Program Office. As of September 15, 1978, 2,141 patients had been registered in this computer. The value of this system is to allow accurate data collection in monitoring of patient compliance with drug prophylaxis.

**The Author**

*ROBERT E. WINDOM, M.D.*

*Dr. Windom practices internal medicine and cardiology in Sarasota, Florida. He is Secretary of the Florida Medical Association and Chairman of the Florida Task Force on Rheumatic Fever and Rheumatic Heart Disease. He recently was named a Director of the American Heart Association.*

One can readily see that progress has been made through the cooperation and coordination of various interest groups through a single channel. There remains much to do in this area, but much can be achieved if adequate funding continues and the Task Force is allowed to continue its service.

Members of the Task Force are: Robert E. Windom, M.D., Sarasota, Florida Medical Association, Chairman; Elia M. Ayoub, M.D., Gainesville, American Heart Association; John Bonomo, D.D.S., Winter Park, Florida Dental Association; Clifford R. Guy, M.D., Jacksonville, American Heart Association, Florida Affiliate; Al Ogden, M.D., Tallahassee, Department of Health and Rehabilitative Services.

Nathan J. Schneider, Ph.D., M.P.H., Jacksonville, Department of Health and Rehabilitative Services; Stanford T. Shulman, M.D., Gainesville, American Heart Association, Florida Affiliate; Louis B. St. Petery, M.D., Tallahassee, Children's Medical Services Program Office; Dolores F. Tamer, M.D., Miami, Florida Medical Association; and John Whitcomb, M.D., Pensacola, American Heart Association, Florida Affiliate.

Ex officio consultants include: S.D. Doff, M.D., Jacksonville; Doris McIntyre, R.N., St. Petersburg; Mittie Moffett, R.N., Tallahassee; and Gerold L. Schiebler, M.D., Gainesville. Ms. Mary A. Nowakowski is the American Heart Association, Florida Affiliate, staff consultant.

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# 23rd Annual Watson Clinic Seminar Program Is Announced

**"Problems in Aging" will be the theme for the 23rd Annual Watson Clinic Seminar in Lakeland on March 10. The program will be acceptable for four hours of AMA Category I Credit and four hours of FMA Mandatory Credit.**

**Jerry Zaslow, M.D., J.D., of Philadelphia, will present the Fourth Annual Jere Annis Lecture. Dr. Annis, a member of the Clinic staff, is a Past President of the Florida Medical Association, and a former member of the American Medical Association Board of Trustees.**

**Dr. Zaslow, who will speak on "Medicare and Governmental Intervention in Care of the Aging," is Associate Professor of Surgery and Lecturer in Law at Temple University. He is a member of the Board of Governors of the College of Legal Medicine.**

**Other faculty will include: E. Everett Anderson, M.D., Professor of Urology, Duke University Medical Center, Durham, N.C.; C. Conrad Johnston Jr., M.D., Professor of Medicine, Indiana University School of Medicine, Indianapolis; and Daniel C. Traviesa, M.D., of the Watson Clinic's Department of Neurology.**

# EDITORIALS

## Spreading Good News

Each day's mail delivery brings to the editors of *The Journal* a small pile of news releases and assorted other written material from a variety of sources, medical, medically-related and non-medical.

Most of this material is scanned, then summarily relegated to the circular file because it is either of little news value or has no relationship at all with our activities.

Of all the news received, nothing pleases us more or makes us prouder to be associated with Florida medicine than to receive word that one of our colleagues has received regional or national recognition through an award or election or appointment to some organizational office.

Since January of 1978, *The Journal* has spread the good news about more than a score of Florida physicians. In January 1979, for example, one story told of five members of the University of Miami School of Medicine faculty being elected or appointed to positions in national specialty organizations.

In the year past we were happy to report on Dr. Luis M. Perez's receipt of the American Medical Association's Benjamin Rush bicentennial Award; Dr. Charlotte H. Kerr's installation as President of the American Medical Women's Association; Dr. Lawrence R. Muroff's election as the youngest President-Elect in the history of the American College of Nuclear Physicians; the designation of Dr. Donald G. Nikolaus as one of the finalists in *Good Housekeeping's* 1978 Family Doctor of the Year Competition; and many others.

In January of 1978, we were pleased to carry a story about Dr. Robert E. Windom being designated as Distinguished Alumnus of the prestigious Duke University Medical Center. One year later, FMA's ubiquitous Secretary was back in the news as a newly-elected Director of the American Heart Association.

These stories and others we reported (and perhaps many that we did not because we didn't know about them) should make all Florida physicians proud that they *are* Florida physicians.

Obviously, when an office or an accolade is bestowed upon a physician, it is primarily in recognition of his or her professional accomplishments, abilities and capabilities.

But beyond that, such honors testify to the high quality of our profession in Florida, and *all* Florida physicians should take pride in that.

If *you* are aware of a colleague who has been similarly honored, why not share it with us?

## Is This Test Really Necessary?

The reader is directed to page 248 of this issue. There is reprinted an article by Franz J. Ingelfinger, M.D. entitled, "Can You Survive a Medical Diagnosis?" Perhaps a subtitle could have been added, "If So, Can You and Society Afford It?"

This article, directed primarily toward the lay reader, appeared in *Human Nature* magazine November 1978. We gratefully acknowledge permission to reprint it.

Dr. Ingelfinger succinctly outlines the problems which accompany technological advances. He points out that we now have the capability for making an exact diagnosis in most cases. However, the diagnostic procedures sometimes carry with them a significant **risk**. All carry with them **cost** in terms of money and time of physicians and staff. Physicians should be aware of the risks and time factors. However, because of the difficulty in easily assembling the dollar costs, many physicians including myself, are less knowledgable about the cost factor. The Florida Medical Association has urged physicians to become familiar with the costs of various procedures and has encouraged hospitals to make patient cost available to physicians. We again urge you to make the effort to become informed.

All of us want a wise physician to care for us. We hope that the wise physician will use good judgment in choosing only necessary diagnostic procedures and consultants with technical expertise when needed to make a clear diagnosis and treatment recommendations. Dr. Ingelfinger has made a good case against overzealous and unthinking diagnostic effort. The wise physician will evaluate the patient to ensure that the condition warrants any and all diagnostic procedures ordered.

F.N.V.

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# ORGANIZATION

## Annual Meeting Scientific Program Offers Category I Credit

Physicians attending the 105th Annual Meeting of the Florida Medical Association will have the opportunity to earn up to 20 hours of AMA Category I Credit.

Robert H. Threlkel, M.D., of Jacksonville, Chairman of the Medical Education Committee of the Florida Medical Foundation, said the Committee has agreed to co-sponsor the program and certify it as meeting the criteria for Category I Credit. This is the second straight year that Dr. Threlkel's Committee has joined the Annual Meeting program as an "accredited co-sponsor." Only an organization accredited by the Liaison Committee on Continuing Medical Education may designate CME programs for Category I Credit.

The Annual Meeting will be held Wednesday to Sunday, May 23-27, at the Diplomat Hotel in Hollywood, Fla. Other co-sponsors will include the medical schools of the University of Miami, the University of South Florida, and the University of Florida.

At least 38 section meetings will constitute the bulk of the scientific program. Since publication of the January issue of *The Journal* was published, the following scientific section has been finalized:

**FRIDAY AFTERNOON — MAY 25**

SECTION ON RADIATION THERAPY
(Co-sponsored by Florida Radiological Society)
Friday—1:30 p.m. to 5:30 p.m.
Kenneth E. Ellingwood, M.D., Gainesville
Program Chairman

"Implant Results Using Iridium 192 for Treatment of the Oropharynx, Hypopharynx, Larynx," A. Visar Syed, M.D., Department of Radiation Medicine, University of Southern California Medical Center, Los Angeles, Calif.

"Use of a Pre-loaded Radium Needle Implant Device for Cancer of the Floor of the Mouth," Robert B. Marcus, M.D., Division of Radiation Therapy, University of Florida College of Medicine, Gainesville.

"The Role of Interstitial Therapy in the Management of Advanced Pelvic Tumors," A. Visar Syed, M.D., Los Angeles, Calif.

"Early Breast Cancer — Results of Treatment Using External Beam and Iridium Implant," A. Visar Syed, M.D., Los Angeles, Calif.

"Prostate Cancer — Treatment with External Beam and $I^{125}$," Leonard Shukovsky, M.D., Fred J. Woods Radiation Therapy Center, Tampa.

"Prostate Cancer — Treatment with External Beam," Kenneth E. Ellingwood, M.D., Assistant Professor of Radiology, Division of Radiation Therapy, University of Florida College of Medicine, Gainesville.

"Prostate Cancer — Treatment with $I^{125}$"

"Special Discussant: Komanduri K. Charyulu, M.D., Professor of Radiology, Division of Radiation Therapy, University of Miami School of Medicine, Miami.

"$I^{125}$ Implant for Pancreas Cancer," A. Visar Syed, M.D., Los Angeles, Calif.

"The Use of Computerized Tomography in Treatment Planning," Herbert D. Kerman, M.D., Department of Radiology, Halifax Hospital Medical Center, Daytona Beach, Fla.

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**See Summary of FMA Board of Governors Meeting January 13-14, 1979, Page 174a**

# Book Reviews

**Book Review Editor**

**F. Norman Vickers, M.D.**

**Homosexualities, A Study of Diversity Among Men and Women** by Alan P. Bell, Ph.D. and Martin S. Weinberg, Ph.D. 505 Pages. Price $12.95. Simon and Schuster, New York, 1978.

Homosexuality as an alternate lifestyle and the right of homosexuals to equal employment and housing opportunities and freedom from harassment has been a lively topic in the press and other media of late. In general more heat than light has been generated because of the fundamentalists, religious and moral feelings aroused in many by the subject of homosexuality. To those who don't belong to the persuasion, "My mind's made up, don't confuse me with facts!" the above volume will be of great interest. The authors report a carefully designed and detailed study of about 1,500 homosexuals of both sexes by highly qualified behavioral scientists. This study, an official publication of the Institute for Sex Research founded by Alfred C. Kinsey, delves into many facets of the homosexual's life and, when possible, compares these dispassionately to those facets of the lives of heterosexuals.

Among these facets, in addition to the dimensions of sexual experience, are participation in the work of the world, religious activities, politics, marriage, friendships and social activities.

The first half of this volume presents a narrative report of the findings with frequent summary paragraphs for the busy reader and many brief human interest accounts for the more leisurely reader. The second half displays in tabular form the cold statistics for those of critical bent, an extensive bibliography and a detailed index. As a thoughtful person might reasonably suspect, in brief, there are few differences between homosexuals and heterosexuals other than their preference for the companionship of those of their own sex and the methods used for the relief of their sexual tensions.

William B. Straight, M.D.
Miami

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Dr. Straight is in the private practice of Internal Medicine in Miami and also Historical Editor for the FMA Journal.

**Dermatology: An Illustrated Guide**. Second edition, by Lionel Fry, B.SC., M.D., FRCP. 164 Pages. Price $19.00. Update Publications Ltd., London, England, 1978.

The author of this text states in the preface that this book is intended for the non-specialist in the area of dermatology. The purpose is to aid in the diagnosis and management of the more common dermatologic problems. These goals are well met by this superbly illustrated text.

Since dermatology is a specialty dependent on sharply honed visual skills, a good text should enable the reader to polish his own visual diagnostic capabilities. This text is well suited to this purpose. There are 506 color illustrations which range in quality from good to excellent. They are of a reasonably large size with excellent color reproduction. Another strong point is the use of multiple illustrations of the same disease process in order to better emphasize locations, variations and manifestations that the clinician will encounter in his practice.

Instead of attempting to be encyclopedic, the author has limited this text to the more common skin problems that the clinician is likely to encounter and treat. This has allowed more space to better cover the material. It should also be mentioned that the book is in no way too limited in its scope, but is of sufficient detail to be extremely helpful.

The text is succinct and well written. A weakness might be the lack of an attempt to explain pathophysiology of the skin processes.

Since the book is of British authorship, some of the terminology will be somewhat unfamiliar to Americans. One example is the use of the term "eczema" in preference to "dermatitis" by our friends across the Atlantic. Another example became apparent when I attempted to look up "diaper rash" in the index. British infants apparently do not get "diaper rash" since they all wear "napkins" and hence develop a "nappy rash!"

The book contains a one page appendix that lists various useful drugs in treating dermatologic problems. I find this rather superficial considering some books of

general medicine have much longer and more useful tables.

In summary, this book must be highly rated. It would be a nice addition to any non-specialist's library which finds itself lacking for want of a good, illustrated dermatology text. The price is extremely reasonable and the illustrations are excellent. Even when the text may become outdated, the photographs will more than fulfill the demands of the holder.

Jerrold A. Van Dyke
Gainesville

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Mr. Van Dyke is an Assistant Editor of the Journal.

**Atlas of Coloscopy** by F. P. Rossini. 205 pages. Price $49.50. Springer-Verlag, New York, Inc., 1975.

This is an elegant book with excellent color plates of colonoscopic photography as well as photomicrographs. These are sections devoted to mechanical details and techniques of passing the instrument, interpretation of findings and colonoscopic polypectomy.

References are complete to 1974. One of the disadvantages of this book is the cost. Most physicians with an interest in colonoscopy (Dr. Rossini prefers to use the term coloscopy) might prefer to have this book as a reference in the medical library or GE lab rather than a personal library. The other disadvantage is that the rapid change in equipment and technique of endoscopy makes such a book soon out of date.

Recommended for medical libraries and training programs for gastrointestinal endoscopists.

F.N.V.

# Books Received

**Receipt of the following books is acknowledged. Medical readers interested in reviewing particular books are invited to address requests to the Book Review Editor. Following acceptance of a written review for publication, a reviewer may then retain the book reviewed for his personal or favorite library.**

**Pharmacological and Toxicological Perspectives of Commonly Abused Drugs** by Darryl Inaba, Ph.D., E. Leong Way, Ph.D., Kenneth Blum, Ph.D. and Sidney H. Schnoll, M.D. 44 Pages. National Drug Abuse Center, Rosslyn, Virginia, 1978.

**Currents in Alcoholism, Biological, Biochemical, and Clinical Studies,** Edited by Frank A. Seixas, M.D. 601 Pages. Illustrated. Price $31.50. Grune & Stratton, Inc., New York, 1978.

**Controlling the Use of Therapeutic Drugs: An International Comparison** edited by William M. Wardell. 263 Pages. American Enterprise Institute for Public Policy Research, 1978.

**Directory of Pathology, Training Programs 1979-80** by the Intersociety Committee on Pathology Information, Inc. 470 Pages. Illustrated. Price $25.00. Geo. W. King, Co., Baltimore, 1978.

**Wholistic Dimensions in Healing, A Resource Guide** by Leslie J. Kaslof. 295 Pages. Illustrated. Price $7.95. Doubleday & Company, Inc., Garden City, New York, 1978.

**Culture and Comment, The New Relationships Between the Generations in the 1970's** by Margaret Mead. 177 Pages. Price $2.95. Anchor Press/Doubleday, Garden City, New York, 1978.

**Uses of Enzymes and Immobilized Enzymes** by Francis X. Hasselberger. 220 Pages. Price $14.95. Nelson-Hall Publishers, Chicago, 1978.

**Between You and Me** by John A. Parrish, M.D., Barbara A. Gilchrest, M.D. and Thomas B. Fitzpatrick, M.D. 239 Pages. Price $8.95. Little, Brown and Company, Boston, 1978.

**Atlas of Dermatology** by Gernot Rassner, M.D. 200 Pages. 201 Full color illustrations. Price $24. Urban & Schwarzenberg, Baltimore, 1978.

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**An idea isn't responsible for the people who believe in it. — Don Marquis**

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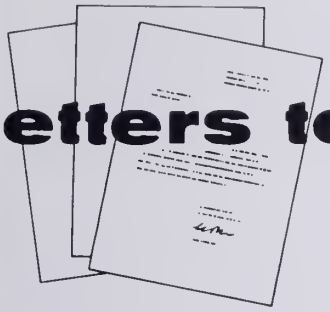

# Letters to the Editors

## PRESCRIPTIONS: A REMINDER THAT YOU MIGHT BE BREAKING THE LAW

**To the Editor:** At the last convention of the Florida Pharmacy Association, the Florida Pharmacy Association House of Delegates passed two resolutions that were related to the practice of medicine. These resolutions reflected the concern of pharmacists over constant and repeated violations of the Florida Drug Abuse Prevention and Control Act by physicians. The Executive Director of the Florida Pharmacy Association was directed by their House of Delegates to contact the proper law enforcement agency and request enforcement of the law as pointed out in the two resolutions. The Executive Director therefore notified the Florida Department of Criminal Law Enforcement and also asked for assistance from the Board of Medical Examiners in pointing out and eliminating these violations of the law by physicians.

The resolutions are as follows:

1) RESOLUTION #34. MULTI-LINE CONTROLLED SUBSTANCES PRESCRIPTIONS
"WHEREAS, Florida Statutes 893.02 (15) states very clearly that prescribers of Schedule drugs have a legally described procedure when using multiple prescription blanks, (no mixing with other classes or non-classes on same prescription blank), and
WHEREAS, many prescribers evidently do not know about this law, and
WHEREAS, many prescribers violate this law every day, therefore, be it
RESOLVED that the Florida Pharmacy Association contact the proper enforcement Agency and ask that they enforce this Statute."
2) RESOLUTION #35. PHYSICIAN I.D. ON HOSPITAL PRESCRIPTIONS.
WHEREAS, Florida Statute 893.04 (1) (c) (2), (Initiated in October, 1975), clearly states that prescribers using prescription blanks that do not have their name printed on them, (e.g., hospital prescription blanks), must print their name to further identify the signature of the prescriber of said medication, and
WHEREAS, countless hours are consumed each year by pharmacists throughout the State of Florida to determine who this prescriber is, therefore, be it,
RESOLVED that the Florida Pharmacy Association contact the proper enforcement agency and ask that this law be enforced immediately."

Physicians note well. The law says that you cannot put legend drugs and controlled drugs on the same prescription blank, nor can you put controlled drugs in different classes on the same prescription blank. The law further states that if the prescriber's name is not printed on the prescription blank, then the prescriber must print his or her name clearly on the blank in order for the pharmacist to be able to properly identify the prescriber.

This is the law of Florida regarding prescription writing. The old saying that ignorance of the law is no excuse still goes. By this message we are trying to make you aware of the law. A word to the wise should be sufficient. Please change your habits right now to conform. Heed this advice and obey the law.

*George S. Palmer, M.D., Executive Director*
*Florida State Board of Medical Examiners*
*Tallahassee*

## COVER ART WANTED

**To the Editor:** As a member of the Board of Editors of the *Southern Medical Journal*, one of my tasks is to select for possible publication an appropriate black-and-white illustration for *The Journal*'s cover each month and to prepare an accompanying legend— Items to be considered should have historic interest to southern medicine and may include photographs or drawings of buildings, significant events, important individuals,

medical devices, etc. Each submission should be identified with a label on the back noting the subject matter, indicating the top of the figure, and giving the name and address of the individual or organization sending the material . . .

I invite the members of your organization to submit items for possible publication, and would greatly appreciate your help in bringing this project to their attention in your Journal. All materials should be sent to me at the following address: Bruce S. Schoenberg, M.D., NINCDS, NIH, Room 7C10, Federal Building, 7550 Wisconsin Avenue, Bethesda, Md. 20014.

*Bruce S. Schoenberg, M.D.*
*Bethesda, Md.*

## THE SYNAPSE (UM)

**To the Editor:** I would like to take this opportunity to thank you for presenting our yearbook, the Synapse, in such a positive fashion in your August 1978 (Vol. 65, No. 8) issue of the Journal of the Florida Medical Association.

Unfortunately, as I am not currently a member of the Florida Medical Association (though I do intend to join soon), I did not receive a copy of this issue, nor did the editor-in-chief of the Synapse, John Cassel. These would make memorable souvenirs for us in the years to come. Any information that you can provide us on how to acquire several copies of this issue would be greatly appreciated.

Thank you.

*J. D. Temple, M.D.*
*(Jump section) Editor*
*Synapse 1978*
*University of Miami School of Medicine*

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**INDICATIONS**: *Therapeutically,* (as an adjunct to systemic therapy when indicated), for topical infections, primary or secondary, due to susceptible organisms, as in: infected burns, skin grafts, surgical incisions, otitis externa; primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia); secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis); traumatic lesions, inflamed or suppurating as a result of bacterial infection. *Prophylactically,* the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

**CONTRAINDICATIONS:** This product is contraindicated in those individuals who have shown hypersensitivity to any of its components. Do not use in the eyes or in the external ear canal if the eardrum is perforated.

**WARNING**: Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.

**PRECAUTIONS:** As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

**ADVERSE REACTIONS**: Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.

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**Twenty-five Florida physicians** . . . were admitted to Fellowship in the American College of Physicians during 1978. Charles K. Donegan, M.D., of St. Petersburg, ACP Governor for Florida, listed the Fellows as follows:

Jorge Alea, M.D., West Palm Beach; Jonathan J. Braunstein, M.D., Robert F. DeLuca, M.D., and Richard S. Mann-Kaplan, M.D., all of Coral Gables; Carlos M. Estevez, M.D., of St. Petersburg; and Richard L. Greenman, M.D., Morton L. Hammond, M.D., Donald R. Harkness, M.D., Michael A. Kaplan, M.D., Jay S. Skyler, M.D., and Francisco Tejada, M.D., all of Miami.

Roger K. Lewis Jr., M.D., Ormond Beach; James E. McGuigan, M.D., Gainesville; Ahmad Rashid, M.D., Fort Pierce; Harold M. Adelman, M.D., Tampa; Axel W. Anderson III, M.D., Orlando; Robert D. Carraway, M.D., Key West; Malcolm T. Foster, Jr., M.D., Jacksonville; Dietmar Gann, M.D., and Jose F. Landa, M.D, Miami Beach; Kenneth S:. Graff, M.D., Melbourne; Charles B. Kahn, M.D., Hollywood; Michael D. Kohen, M.D., Daytona Beach; Alvaro I. Martinez, M.D., Hialeah; and Abdur Rahim, M.D., Miami.

**Richard S. Hodes, M.D., of Tampa** . . . was among the speakers at the Interim Meeting of the American Society of Internal Medicine in Orlando, September 29-30, 1978. Dr. Hodes participated in a panel entitled "Adventureland: The Legislative Jungle and Bureaucratic Swamp."

Speaking as a practicing physician, a member of the State Legislature and President-Elect of the Florida Medical Association, Dr. Hodes advocated having state medical associations represent the interests of all physicians with input from state specialty organizations.

**Albert L. Rhoton, M.D., of Gainesville** . . . has been named the "R.D. Keene Family Professor of Neurosurgery" at the University of Florida College of Medicine, where he serves as Chief of Neurosurgery.

A $1 million gift from the Keene family to endow a neurosurgery professorship was announced in the January issue of *The Journal* (Page 139).

Dr. Rhoton was named to administer the funds which will provide salary support for clinical practice, education and research in microsurgery. A graduate of the Washington University School of Medicine, Dr. Rhoton joined the University of Florida after six years of teaching and practice at the Mayo Clinic.

Dr. Rhoton recently completed a term as President of the Congress of Neurological Surgeons, which reportedly is the largest organization in the world in that specialty.

**Rodney Million, M.D., of Gainesville** . . . has received the Emil H. Grubbe Radiation Therapy Foundation gold medal at a meeting of the Chicago Radiological Society. The award is given each year to an individual who has distinguished himself in either therapeutic or diagnostic radiology.

Dr. Million is Professor and Chief of the Division of Radiation Therapy at the University of Florida College of Medicine.

Dr. McGuigan

**James E. McGuigan, M.D.**, of the University of Florida College of Medicine . . . has been awarded a five-year grant of $635,000 to begin an intensive study of the mechanisms involved in the development of peptic ulcers.

Dr. McGuigan, Professor and Chairman of the Department of Medicine, is receiving the support from the National Institute of Arthritis, Metabolic and Digestive Diseases, Bethesda, Maryland.

Dr. McGuigan and his associates will examine the hormone gastrin, which regulates the secretion of stomach acid. They will investigate mechanisms involved in the control of gastrin synthesis and release of gastrin into the blood circulation.

Mr. Flaherty

**Mr. William E. Flaherty** . . . has assumed duties as President of Blue Cross and Blue Shield of Florida. He succeeds Mr. J. W. Herbert, who retired after nine years in the post and a total of 33 years with Blue plans in Florida and Illinois.

Mr. Flaherty, 43, has been President of Blue Cross and Blue Shield of Deleware for the past 3½ years and formerly was Executive Vice President of Blue Cross of Michigan.

A graduate of Wayne State University in Detroit, Mr. Flaherty began his career with the Blues in 1961, when he joined Blue Shield of Michigan as Manager of Marketing Research. He is married and the father of five children.

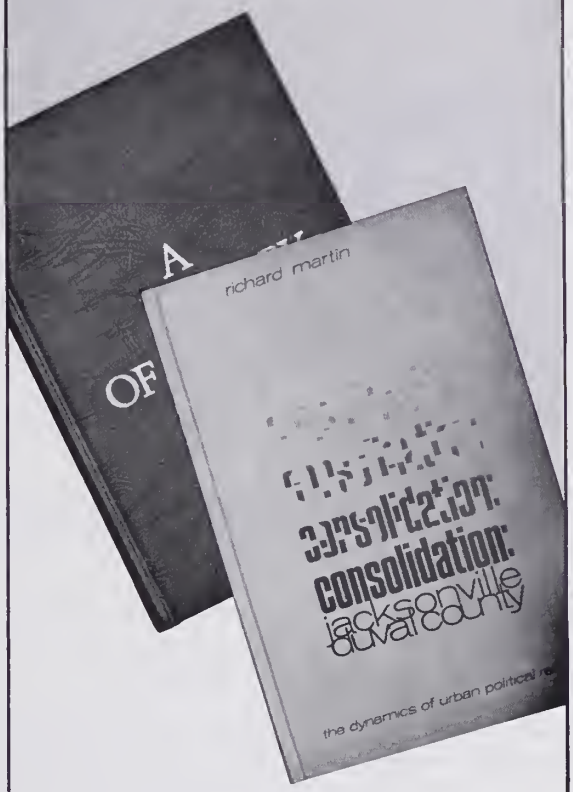
**Five Florida organizations and hospitals** . . . have been accredited or reaccredited for continuing medical education by the Liaison Committee on Continuing Medical Education (LCCME).

Meeting in Chicago on December 14, 1978, the LCCME conferred regular accreditation for three years on the Dade County Medical Association and the Medical Education Committee of the Florida Medical Foundation. Both had been in one-year provisional accredited status for one year.

In all five cases the LCCME accepted affirmative recommendations from the Florida Medical Association's Committee on Continuing Medical Education, which had conducted the local survey work.

LCCME is the accrediting authority for continuing medical education programs throughout the United States. Only accredited agencies may designate educational programs for AMA Category I Credit.

**Ronald J. Mann, M.D., of Miami** . . . has been named Chairman of the Southern Medical Association's Section on Orthopaedic and Traumatic Surgery. Dr. Mann is Assistant Professor of Orthopaedics and Rehabilitation at the University of Miami School of Medicine.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# Florida Medical Association Auxiliary, Inc.

## THIRTEENTH ANNUAL BENEFIT ART SHOW

### Exhibit Rules and Regulations

### Read Rules Carefully

1. All entries must be original work.
2. Pictures must be framed and wired for hanging. (Stands will be provided for sculpture, etc.)
3. Each entry must have a typed card indicating Name, Address, Medium, Dimensions and Title. Please list price if entry is for sale; otherwise, mark not for sale (NFS).
4. Only one artist's name should be listed for each registration slip.
5. A registration fee of $10 will be charged for each entry. Entry fees are tax deductible.
6. All registration slips and checks must be sent in together no later than May 9, 1979.
7. All pre-registered entries are to be delivered by hand to the Exhibit Hall at the Diplomat Hotel no later than 3:00 p.m. Wednesday, May 23. Shipped entries will be refused.
8. All entries must remain on exhibition until 3:00 p.m., Saturday, May 26. They MUST be picked up between 3:00 and 4:00 p.m., Saturday.
9. We will not be responsible for entries not picked up by 4:00 p.m., Saturday, May 26, 1979.
10. Doctors, their wives and children are eligible to enter. Entry fees will be donations to AMA-ERF, divided equally among Florida medical schools.

Kindly enter my registration to show in the Benefit Art Show.

Fee of $_____ for _____ entries is enclosed. I agree to abide by the rules and regulations for exhibiting material in the show.

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I will be showing in the following categories: Please check (X) appropriate category (categories) applying to your entry (entries).

( ) A. Painting. Include any media in color: acrylic, oil, casein, collage, watercolor, pastel, etc.

Size: _____ (H) x _____ (W) To be hung on wall.

( ) B. Graphics. Include a pen and ink, charcoal, photography, etc.

Size: _____ (H) x _____ (W)

( ) C. Crafts. Include sculpture, pottery, ceramics, mosaic, weaving, jewelry, etc.

Size: _____ (L) x _____ (D) x _____ (H)

( ) I am the son/daughter of a Florida physician. Age _____

Judges will give "Awards of Merit" and "Best in Show." An "Editor's Award," given by the Journal of the Florida Medical Association, will be used on the cover of a future issue of the FMA Journal.

A registration fee of $10 will be charged for each entry. Make checks payable to:

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NOTE: It is most important to know the size of your art objects, paintings, etc., to enable us to display them more professionally. We will not be responsible for damage or loss of any entry.

**REGISTRATION DEADLINE MAY 9, 1979**

Judging will take place beginning at 9:00 a.m. on Thursday, May 24, 1979.

# Others Are Saying

## Can You Survive a Medical Diagnosis?

**Franz J. Ingelfinger, M.D.**

***The quest for the absolutely certain diagnosis endangers patients and contributes to the runaway price of health care.***

In spite of the many marvels of technology, the American public is taking an increasingly critical look at all new processes and devices. The urgent question that follows each development is: To what extent do its benefits balance or outweigh the risks incurred? Such cost-benefit analyses are particularly applicable to modern medical care, which entails huge expenses and considerable risks. Specifically, does the doctor, in trying to confirm a diagnosis, reach a point where further diagnostic processes harm rather than help both the patient and society?

Since World War II, but especially in the last decade, the technology used in diagnosis has proliferated fantastically; if all available procedures are used, doctors can now diagnose an illness with close to 100 percent accuracy. In major teaching hospitals patients still die, but they rarely die undiagnosed.

These new techniques include extremely sensitive measurements made by radioactive isotopic assay of the contents of the body's tissues and fluids; the use of needles, catheters, and radiopaque dye to outline blood vessels and secretory systems in the body; biopsies, which provide samples of organ tissue; image-transmitting fiber-optic tubes, or endoscopes, which function as flexible "telescopes" that allow doctors to inspect and take tissue samples of the insides of hollow organs like the stomach and intestines; ultrasound, which uses the principles of sonar to detect disease; scans that, after the injection of radioactive substances, reveal normal and abnormal aspects of organ structure; and computerized tomography (CAT scan), which delineates cross-sectional areas of the body with multidirectional x-ray beams.

Important features of these modern diagnostic methods are:

They enable physicians to obtain data that were previously unavailable. Formerly, for example, a jaundiced patient who was suspected of having a blockage in the bile duct,, which leads from the liver to the duodenum, usually had to have an operation to confirm the suspicion and to define the nature of the blockage. Now, other methods can be used: ultrasonography, or the injection of radiopaque material into the biliary system through a thin, flexible needle or through a small tube inserted into the system with the help of an endoscope passed from the mouth to the duodenum.

They are scarce and expensive and require exceptionally well-trained personnel. When the charges are added up — for the endoscope operator, the use of hospital facilities, supplemental x-rays, and x-ray interpretations — the cost often exceeds $1,000.

When they require the use of needles or catheters, the tests may have serious consequences, such as bleeding, the rupture of an organ, infection or even death. The thin, flexible needle that is used to inject dye into the biliary system must first be passed through the skin and into the liver until it enters a tube of the system. In the process, the needle may puncture a blood vessel or allow infected bile to escape.

Because of such risks, the patient must be hospitalized.

Tests like the endoscopic procedure described are often uncomfortable or distressing.

They may require repeated exposure to x-rays or other types of radiation that may ultimately affect the patient adversely.

They consume the time of patients, health services, and physicians. Endoscopic examinations at a major hospital may require the entire moring of two staff

members, two trainees, a specially trained nurse, an assistant, and a secretary.

Together these characteristics of modern medicine create a dilemma for both the competent and compassionate physician and the cooperative sensible patient: To what extent should doctors use the ultrasophisticated devices of modern technology in the pursuit of diagnositic accuracy before they decide on treatment, be it surgical, medical, or essentially doing nothing?

Let us assume that, for a particular patient, a doctor who uses conventional methods of diagnosis and supplements them with one modern technique can establish a diagnosis that has a 95 percent chance of being correct. Adding a second modern procedure may raise this level of confidence to 97 percent, a third to 98 percent, a fourth to 98.6 percent, and a fifth to 99.2 percent.

As more and more modern tests are used, the likelihood of a correct diagnosis gradually approaches 100 percent, but the increments between each new level of confidence diminish rapidly, whereas the costs increase linearly. Each small gain in accuracy costs money and time, ties up scarce resources, and most important, impairs the patient's health and comfort disproportionately.

From a long-term viewpoint, the millions of dollars spent on the battery of modern tests aimed at the will-o'-the-wisp of 100 percent diagnostic accuracy make a major contribution to the inflationary prices of health care, prices that now represent about 9 percent of the gross national product. After 95 percent diagnostic confidence confidence is achieved, the ratio of the benefits of a diagnostic procedure to its cost decreases rapidly, and I propose that, on the average, the individual is better served if the goal is pegged at 95 percent diagnostic accuracy rather than at 100 percent.

The institution that is modern health care would dis discourage such a proposal. The tradition that the medical profession observes and to which the public subscribes is that doctors should do everything for their patients. "Everything" usually means every possible *positive* action: doing something instead of following a more rational program in which "everything" would include doing nothing — *not* performing certain tests even though they are available. Tradition is not the only source of pressure. Doctors' ego and peace of mind also persuade them to pile on test after test. The medical profession rarely criticizes the disadvantages and occasional mishaps of an elaborate diagnostic endeavor, but physicians who miss a diagnosis, particularly if it is cancer, because they did not perform a certain test face the specter of loss of respect from their peers and malpractice suits from their patients.

Under these circumstances it is doubtful whether the medical profession, other providers of health services (nurses, physicians' assistants, and therapists), the public, the courts, or legislators will ever voluntarily accept a goal of 95 percent diagnostic confidence in place of the goal of 100 percent that the medical-industrial-political complex now favors. Unlike social critic Ivan Illich, who claims that medicine is the major cause of ill health, I do not call for demedicalization, because the new techniques of diagnosis have their place. But should there be a crisis, a severe financial depression, war, or drastically curtailed sources of energy, the political and economic pressures might persuade givers and receivers of medical care that patients and society would be better served if we were content with 95 percent diagnostic accuracy.

**Franz Ingelfinger** *was editor of the New England Journal of Medicine from 1967 to 1977 and is now its editor emeritus. He received his medical degree from the Harvard Medical School and afterward performed pioneering studies in gastroenterology.*

*His editorials in the* New England Journal *have covered a wide range of themes concerning the social, economic, and scientific aspects of medicine. Ingelfinger is a master of the American College of Physicians and coeditor of* Controversy in Internal Medicine II.

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# Living Up To Principles

**Tom E. Nesbitt, M.D.**

In my travels, I am frequently asked variations of the same question, "What has the AMA done for me lately?" by disgruntled physicians who often single out our responses to government involvement.

So I tell them what the AMA is doing, in the Congress and the courthouse, to prevent arbitrary government intervention, and to preserve the superb, healing quality of American medical education and practice.

Then I turn the tables. I ask the physician, "What have *you* done lately for the AMA, and for American medicine?" I think the question is a fair one, and deserves a fair answer. Because as physicians, we have responsibilities, as well as rights. And the best way to defend the latter is to fulfill the former, particularly our responsibilities in the socioeconomic and political dimensions of medical care.

And this fulfillment, in turn, can be best achieved through the support of every physician at every level of this federation of ours, including the national level. The AMA deserves support.

I believe that each physician who graduates from a U.S. medical school owes a great debt to the AMA, which played (and continues to play) a leading role in making our medical schools the finest in the world.

I believe that each physician privileged to practice in this country owes a great debt to the AMA, which has long guarded (and continues to guard) those opportunities for medical freedom and creativity found nowhere else in the world.

Finally, I believe that each physician who fails to support the AMA is failing to live up to those traditions and principles upon which the past, present, and ultimately the future, of American medicine rest.

Such physicians, the "free riders" of medicine, might heed the words of the late Adlai E. Stevenson, the American attorney and diplomat, who said," . . . it is often easier to fight for principles than to live up to them."

---

Reprinted from Hampden HIPPOCRAT (District Medical Society, Massachusetts), September 1978. Dr. Nesbitt is President of the AMA.

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**Precautions:** Use with caution in patients with cardiac disease, hepatic or renal impairment. Concurrent administration with certain antibiotics, i.e., clindamycin, erythromycin, troleandomycin, may result in higher serum levels of theophylline. Plasma prothrombin and factor V may increase, but any clinical effect is likely to be small. Metabolites of guaifenesin may contribute to increased urinary 5-hydroxyindoleacetic acid readings, when determined with nitrosonaphthol reagent. Safe use in pregnancy has not been established. Use in case of pregnancy only when clearly needed.
**Adverse Reactions:** Theophylline may exert some stimulating effect on the central nervous system. Its administration may cause local irritation of the gastric mucosa, with possible gastric discomfort, nausea, and vomiting. The frequency of adverse reactions is related to the serum theophylline level and is not usually a problem at serum theophylline levels below 20 mcg/ml.
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*Medical Coordinator*

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*Veterans Admin. Hospital*
*Bronx, New York*

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***Robert A. Good, M.D., Ph.D.***
*President and Director*
*Sloan-Kettering Institute for Cancer Research*
*New York, New York*

***"Molecular Cloning of Genetic Elements: Implications for Basic and Medical Science"***

***Paul Berg, Ph.D.***
*Willson Professor of Biochemistry*
*Stanford University*
*School of Medicine*
*Stanford, California*

***"Ischemic Myocardial Failure: Its Mechanism, Treatment and Prevention"***

***Eugene Braunwald, M.D.***
*Hersey Professor and Head*
*Department of Medicine*
*Harvard Medical School*
*Boston, Massachusetts*

### Panels and Panelists

***"The Impact of Radioimmunoassay on Early Diagnosis and Therapy"***

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*Chairman*
*Dept. of Medicine*
*University of Florida*
*College of Medicine*

***Eric Reiss, M.D.***
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***Allen W. Root, M.D.***
*Professor*
*Dept. of Pediatrics*
*University of South Florida*
*College of Medicine*

***"Immunologic Control of Carcinogenesis and its Future in Therapy"***

***Henry Gewurz, M.D.***
*Coogan Professor and Chairman*
*Dept. of Immunology*
*Rush University*
*College of Health Sciences*
*Chicago, Ill.*

***Roy S. Weiner, M.D.***
*Associate Professor of Immunology and Medical Microbiology*
*University of Florida*
*College of Medicine*

***C. Gordon Zubrod, M.D.***
*Director*
*Comprehensive Cancer Center for the State of Florida*
*University of Miami*
*School of Medicine*

***"Is Genetic Surgery (Gene Therapy) a Plausible Approach to the Treatment or Prevention of Genetic Disease?"***

***Kenneth I. Berns, M.D., Ph.D.***
*Professor and Chairman*
*Dept. of Immunology and Medical Microbiology*
*University of Florida*
*College of Medicine*

***Karl H. Muench, M.D.***
*Professor of Medicine and Biochemistry*
*Dept. of Medicine*
*University of Miami*
*School of Medicine*

***Thomas A. Tedesco, Ph.D.***
*Assistant Professor and Director*
*Genetics Division*
*Dept. of Pediatrics*
*University of South Florida*
*School of Medicine*

***"The Future for Coronary By-Pass Surgery"***

***C. Richard Conti, M.D.***
*Professor of Medicine*
*Division of Cardiology*
*University of Florida*
*College of Medicine*

***Gerard A. Kaiser, M.D.***
*Daughtry Professor and Chief*
*Division of Thoracic and Cardiovascular Surgery*
*University of Miami*
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*President*

# Where do you stand on these issues?

| Pro | Con | |
|---|---|---|
| ☐ | ☐ | Maternal and child care programs |
| ☐ | ☐ | Federal aid to medical students |
| ☐ | ☐ | Extending private health insurance to everyone |
| ☐ | ☐ | Nationwide program of community emergency medical services |
| ☐ | ☐ | Reform of the tort system of malpractice adjudication |
| ☐ | ☐ | Maximum Allowable Cost (Drug) Regulations |
| ☐ | ☐ | Health Planning Act of 1974 |
| ☐ | ☐ | Federal control of the number and location of residences |
| ☐ | ☐ | Federal standards for licensure and relicensure |
| ☐ | ☐ | Federal national health service |

If you're for the first five but against the second five, you stand where the AMA stands.

The AMA has vigorously supported virtually all recent legislation to provide more and better health care for the public. The AMA has just as staunchly opposed any plan that would infringe on your right to practice the way you choose.

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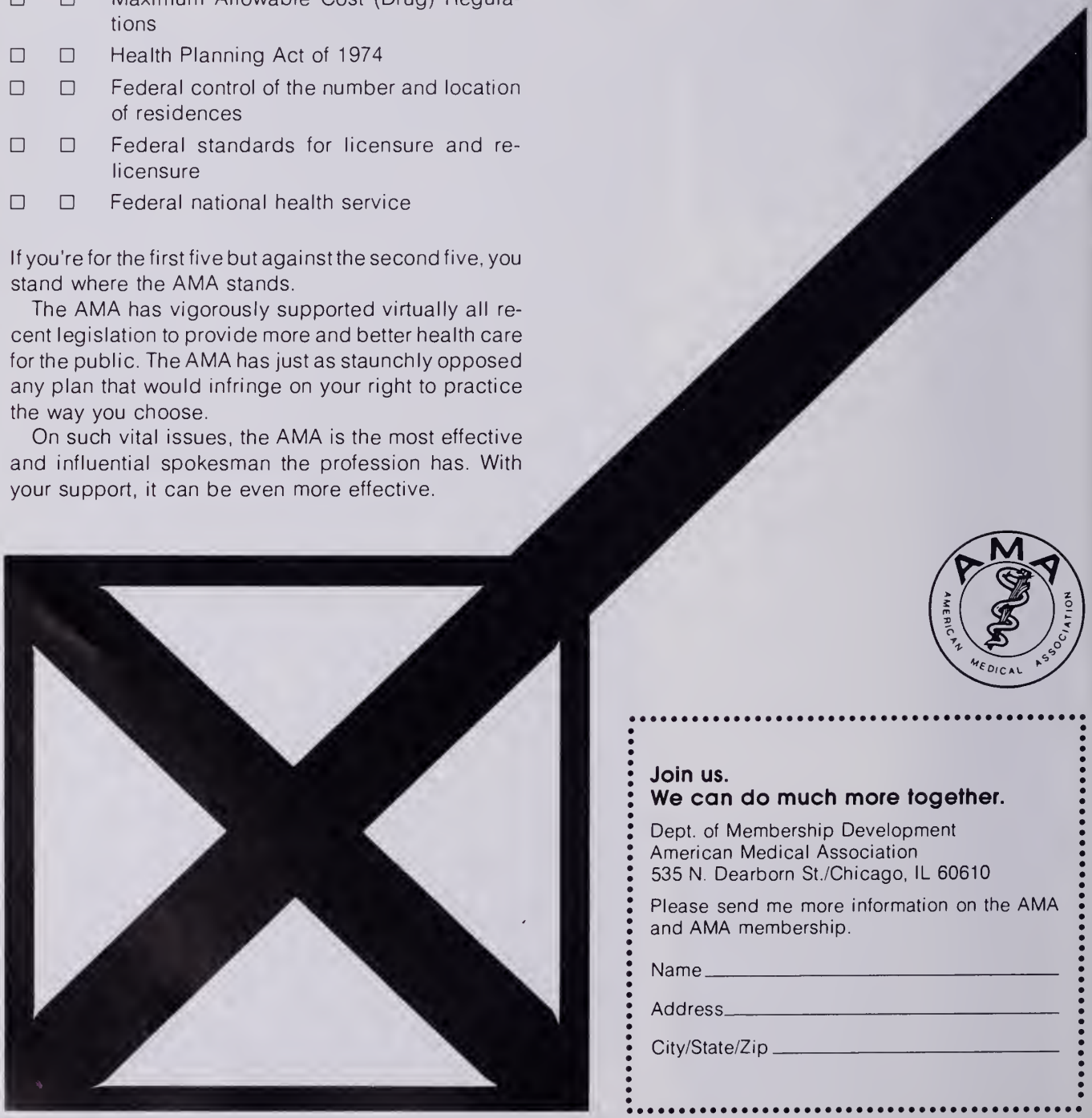

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# MEETINGS

## Approved by the FMA Committee on Continuing Medical Education

### MARCH

**Gynecologic Endocrinology and Infertility,** Mar. 1-3, Orlando Hyatt House, Orlando. For information: Bernard Cantor, M.D., Dept. Ob. Gyn., Box J-294, JHMHC, Univ. of Fla., Gainesville 32610.

**6th Annual Topics in Urology,** Mar. 1-3, Gainesville Hilton, Gainesville.**

**Skin 1979: Modern Management of Common Skin Diseases,** Mar. 2-4, Carillon Hotel, Miami Beach.*

**Symposium on Management of Uveal Melanomas,** Mar. 3, University of South Florida College of Medicine, Tampa.+

**Postgraduate Medical Refresher Course,** Mar. 5-15, Galt Ocean Mile Hotel, Fort Lauderdale. For information: Donald R. Lannin, M.D., 832 Central Medical Building, St. Paul, Minnesota 55104.

**4th Annual Suncoast Trauma Seminar,** Mar. 6-9, USF Medical Center Auditorium, Tampa.+

**Medical Imaging 1979,** Mar. 8-10, Royal Biscayne Hotel, Miami.*

**Cardiac Symptoms and Arrhythmias,** Mar. 9-11, Americana Hotel, Bal Harbour. For information: William E. James, Ph.D., 64 Inverness Dr., E., Englewood, Colorado 80112.

**Psychiatry, Present and Future,** Mar. 10, Sheridan Hotel, Miami. For information: David G. Pinosky, M.D., 1660 Northwest 7th Court, Miami 33136.

**Medical Hypnosis and Short-Term Psychotherapy,** Mar. 10-14, Americana Hotel, Miami Beach.*

**Current Trends in Radioimmunoassay 1979,** Mar. 11-13, Royal Biscayne Hotel, Miami.*

**Problems in Rheumatology,** Mar. 15-18, Don CeSar Beach Resort Hotel, St. Petersburg Beach.+

**10th Annual Topics in Internal Medicine,** Mar. 22-24, Hyatt House, Kissimmee.**

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***For information: Contact Division of Continuing Medical Education, D23-3, University of Miami School of Medicine, P.O. Box 016960, Miami 33101. Tel. (305) 547-6716.**

****For information: Contact Division of Continuing Education, Box J-233, J. Hillis Miller Health Center, Gainesville 32610. Tel. (904) 392-3143, or 392-3183.**

**+For information: Contact Janifer M. Judisch, M.D., CME, University of South Florida, Tampa 33620. Tel. (813) 974-2074.**

**International Conference on Tuberculosis,** Mar. 22-24, Royal Plaza Hotel, Orlando. For information: Dale E. Braddy, 911 Busse Highway, Park Ridge, Illinois 60068.

**Advances in Endocrinology and Diabetes '79,** Mar. 23-24, Don CeSar Resort Hotel, St. Petersburg Beach. For information: Samuel E. Crockett, M.D., 1414 S. Kuhl Ave., Orlando 32806.

**American and European Views on Anesthesiology,** Mar. 24-31, Zermatt, Switzerland.*

**Laparoscopy Course,** Mar. 26-27, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th Street, Jacksonville 32209.

**Medical Imaging Seminar II,** Mar. 28-31, Konover Hotel, Miami Beach. For information: June K. Allen, 4300 Alton Road, Miami Beach 33140.

**Diagnosis and Management of Cerebrovascular Diseases for the Medical Practitioner,** Mar. 30-31, Helmes Regional Medical Center, Melbourne. For information: Pat B. Unger, M.D., 1281 S. Hickory St., Melbourne 32901.

**Directions in Forensic Psychiatry,** Mar. 30-31, Bay Harbor Inn, Tampa.+

**Advanced Cardiac Life Support,** Mar. 31-Apr. 1, Pasco-Hernando Community College, New Port Richey. For information: James M. Marlowe, M.D., P.O. Box 249, Elfers 33531.

### APRIL

**Cirrhosis & Portal Hypertension: Recent Advances in Diagnosis and Therapy,** Apr. 5, Tampa.+

**Tutorial Courses of Instruction in Coronary Care for the Practicing Physician,** Apr. 9-14, Jackson Memorial Hospital, Miami.*

**Laparoscopy Course,** Apr. 23-24, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th Street, Jacksonville 32209.

**Myocardial Infarction and Other Ischemic Heart Syndromes,** Apr. 25-28, Innisbrook Resort, Tarpon Springs.**

**The Impact of Basic Research Today on Clinical Medicine Tomorrow,** Apr. 26-29, Sarasota. For information: Charles R. Estill, 1865 Hawthorne Street, Sarasota 33579.

**Sarasota Medical Awards Conference**, Apr. 26-29, Hyatt House, Sarasota. For information: S. P. Bralow, M.D., 1515 South Osprey Ave., Sarasota 33579.

**Seventh Annual Surgical Intensive Care Symposium**, Apr. 27-30 (location to be announced).*

**Tutorial Courses of Instruction in Coronary Care for the Practicing Physician**, Apr. 30-May 5, Jackson Memorial Hospital, Miami.*

MAY

**7th Annual Intensive Care Symposium**, May 4-7, Eden Roc Hotel, Miami Beach.*

**Ultrasound (General) In-Service Workshop**, May 7-11, Jackson Memorial Hospital, Miami.**

**Detection and Colposcopy & Update in Gynecologic Oncology**, May 13-19, Royal Biscayne Beach Hotel and Racquet Club, Key Biscayne.*

**9th Family Practice Review**, May 16-19, Gainesville Hilton, Gainesville.**

**Laparoscopy Course**, May 28-29, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th Street, Jacksonville 32209.

JUNE

**Master Approach to Cardiovascular Problems — 7th Annual Conference**, June 8-10, The Contemporary Hotel, Lake Buena Vista.*

**Florida Suncoast Pediatric Conference**, June 10-13, Sheraton Sand Key Hotel, Clearwater. For information: Donald Macdonald, M.D., 1510 Barry St., Suite C, Clearwater 33516.

**Laparoscopy Course**, June 25-26, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th Street, Jacksonville 32209.

JULY

**Coronary Disease, Exercise Testing, and Cardiac Rehabilitation**, July 13-15, Royal Plaza Hotel, Orlando. For information: Mr. Stephen E. Mattingly, IMEC, 64 Inverness Drive East, Englewood, Colorado 80112.

**Laparoscopy Course**, July 30-31, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th Street, Jacksonville 32209.

AUGUST

**ECG Interpretation & Arrhythmia Management**, Aug. 17-19, Orlando Hyatt, Orlando. For information: William E. James, Ph.D., 64 Inverness Dr., E., Englewood, Colorado 80112.

**Laparoscopy Course**, Aug. 27-28, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th St., Jacksonville 32209.

# MEDICAL MESSAGE

from the Florida Doctors

## The Common Cold

The common cold is the commonest of all communicable diseases and the commonest of all illnesses afflicting mankind. It outnumbers any other disease about 25 to 1. It has been estimated the average American has about three a year.

There is still no drug specifically effective against the virus of the common cold. Although a cold in itself is not serious, several of its complications are and this is where your doctor can help. Infection may become involved with the sinuses or any part of the respiratory tract, or with the eyes, ears or kidneys. Maintenance of general health by correct eating, proper clothing, exercise, and the proper amount of sleep are important as preventives of the common cold.

RECOMMENDED TREATMENT OF COLDS

Treatment of a cold is associated with a few simple rules which most people do not follow. Going to bed at the first symptoms of a cold is the best advice. Staying in bed helps in two ways: by keeping energy expenditure minimum and by making it easier to regulate the body temperature so as to avoid chilling and its consequences. Also staying in bed is a benefit to others as it prevents the cold victim from spreading his infection. As most people know, the earliest symptoms of a cold is a feeling of dryness and irritation in the nose and throat, often experienced a full 24 hours before other symptoms appear.

HOW ARE COLDS TRANSMITTED?

Colds are transmitted from person to person chiefly by lets given off from the nose throat in sneezing, coughin talking. This is why it is no courteous but a scientific preventive measure to cove sneezes and coughs with a handkerchief.

Most colds cure themselves time. If fever which was pr at the onset disappears and returns, this may signal a complication. After 24-48 h there should be improveme your condition worsens — c fever, trouble breathing, ea ache, etc., you should cons your doctor.

*This is a medical message from the Florida Medical Association in behalf of the doctors of Florida and as a public service feature*

# CLASSIFIED ADS

**Physicians Wanted**

## FAMILY PRACTITIONERS

GENERAL PRACTITIONER: For well equipped medical clinic immediately adjacent to 120 bed skilled nursing facility; would also act as medical director for nursing home. Salary 100% of intake. Contact: Administrator, Wakulla Manor Nursing Home, P.O. Box 508, Crawfordville, Florida 32327. Phone: (904) 926-7181.

FAMILY PRACTITIONER. Growing community in northeast Florida offers immediate opportunity to establish private practice. Excellent schools, beautiful beaches, year-round outdoor recreation. Contact: Claude Weeks, Executive Director, Flagler Hospital, P.O. Box 100, St. Augustine, Florida 32084. Phone: (904) 824-8411.

FAMILY PRACTITIONER OR INTERNIST WANTED to share facilities with three practitioners in solo practice. Major equipment provided. Rent $250 per month. Competent laboratory and x-ray departments with income based on use. Bookkeeping system and receptionist shared. Contact: T. C. Kenaston Jr., M.D., P.O. Box 550, Cocoa, Florida 32922.

WANTED IMMEDIATELY, TWO PHYSICIANS, M.D. or D.O. with family practice or general practice background. US residency and Florida license required. Forty hour work week, straight salary, federally funded primary health care clinic. Facilities, utilities, staff, supplies, instruments and all insurances, including malpractice, furnished. Send references, resume, salary expected and telephone number. Relocation assistance if desired. Call collect Marian Marsh (904) 834-2124.

SOLO OPPORTUNITIES: LEHIGH ACRES, Lee County, Southwest, Florida Family/General Practitioner or Internist, board certified or eligible for beautifully developed retirement community, 13 miles East of Fort Myers. Local general hospital with supportive board, specialty support, excellent potential income with initial financial assistance negotiable. Address curriculum vitae and inquires to: Dr. P. Callahan, P.O. Box 1686, Largo, Florida 33540. Phone: (813) 446-3245.

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## SPECIALISTS

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INTERNIST — Excellent opportunity for physician to practice internal medicine in expanding North Florida community. No internist currently practicing in community. Attractive 128-bed new hospital which provides excellent facilities for treatment. For additional information contact John E. Knight, Administrator, Lake Shore Hospital, Lake City, Florida 32055. Phone: (904) 752-2560.

CENTRAL FLORIDA MULTISPECIALTY CLINIC HAS OPENING for second general surgeon. Good financial opportunity; new well equipped office near three hospitals. Write C-893, P.O. Box 2411, Jacksonville, Florida 32203.

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PSYCHIATRIST. IMMEDIATE OPENING. Full-time private solo practice, or may affiliate part-time with Tri-County Mental Health Association. Contact: Claude Weeks, Executive Director, Flagler Hospital, P.O. Box 100, St. Augustine, Florida 32084. Phone: (904) 824-8411.

WEST PALM BEACH: Solo practitioner Internist seeking Internist, board eligible or certified. Subspecialty in Cardiology preferred. Write C-907, P.O. Box 2411, Jacksonville, Florida 32203.

GENERAL SURGEON. Associate wanted. Miami. Please send curriculum vitae to C-911, P.O. Box 2411, Jacksonville, Florida 32203.

NEUROLOGIST NEEDED by twenty man multispecialty group located in beautiful Northwest Florida beach community. Guaranteed compensation with incentive leading to partnership. No investment required. New clinic building located adjacent to near-new 235-bed hospital. Contact: Theodore E. Rahe, Administrator, White-Wilson

Medical Center, Fort Walton Beach, Florida 32548. Phone: (904) 863-4121.

ORTHOPEDIST — Excellent opportunity for the right man in twenty physician multispecialty group in beautiful Northwest Florida beach community. Immediate incentive compensation plan with guarantee leading to full partnership. No investment required. Ideal practice setting in new building located directly across the street from new modern hospital. Contact: Theodore D. Rahe, Administrator, White-Wilson Medical Center, Fort Walton Beach, Florida 32548. Phone: (904) 863-4121.

## MISCELLANEOUS

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### Situations Wanted

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SITUATION WANTED: 37 year old, Board Certified, OB-GYN specialist, subspecialty Boards in perinatology, seeks solo or group practice. Write C-899, P.O. Box 2411, Jacksonville, Florida 32203.

FAMILY PRACTITIONER, 31, board eligible, seeks group, associate, partnership or solo in southern Florida. Available February 1st. Florida license applied for. Please reply: 19781 Futura Drive, Yorba Linda, California 92686.

PSYCHIATRIST, BOARD CERTIFIED, FLORIDA LICENSED, AGE 47, seeks private practice situation or full-time position with possibility of private practice in East or West Florida coastal areas. Experienced in various psychodynamic therapies, consultation, community mental health, and administration. Currently holds senior administrative/clinical position in Mid-South University Medical Center. Reply C-909, P.O. Box 2411, Jacksonville, Florida 32203.

ORTHOPAEDIC SURGEON — Young, American, university trained, board certified, with military obligation satisfied. Experienced in trauma, joint replacement, arthroscopy, etc. Write C-910, P.O. Box 2411, Jacksonville, Florida 32203.

OB/GYN, with Florida license, seeking solo or small group position. Please contact T. Dalkalitsis, M.D., 30507 Ridgehurst Drive, Wickliffe, Ohio 44092. Phone: (216) 585-4388 evenings or (216) 795-6000 (Mt. Sinai Hospital) days.

33 YEAR OLD SURGEON with Florida license is looking for position in surgery. Please write: Dr. Sanchez, P.O. Box 67, Leeds, New York 12451.

ANESTHESIOLOGIST, 35 years old, Florida licensed, university trained with 3 years of fellowship. Experienced in all anesthetic modalities. Prefer fee-for-service. Solo or any other reasonable offers considered. Phone: (305) 651-1929.

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AMERICAN TRAINED INTERNIST looking for association and eventual partnership with other board eligible/certified internists. Available summer of 1979. Write to Dr. Steven Cohen, 80-35 Springfield Blvd., Queens Village, New York 11427.

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### Practices Available

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ONCOLOGIST/INTERNIST, planning to return to academic medicine, seeks colleague to buy or assume lucrative busy practice. Modern, fully equipped office designed for two physicians. Superb location, South Florida Gold Coast, convenient to hospitals, housing, highways. You must see this opportunity to believe it. Reply with phone number to C-908, P.O. Box 2411, Jacksonville, Florida 32203.

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FLORIDA LICENSED PHYSICIAN NEEDED immediately to take over active general practice in Broward County. Sale is for equipment only. Excellent gross. Write C-914, P.O. Box 2411, Jacksonville, Florida 32203.

**Real Estate**

OUTSTANDING LOCATION FOR SPECIALIST: St. Nicholas Medical Center. Central location, off street parking and all utilities furnished (including janitor service). Contact W. G. Allen, Jr., Owner-Manager, St. Nicholas Medical Center, 3127 Atlantic Boulevard, Jacksonville 32207. Phone: (904) 398-5500.

LAKELAND, FLORIDA: FOR SALE, 6% down. Air-conditioned office for one to three physicians. Main street, 168 x 140 ft.; double parking lots; extra cottage. Dr. L. Polskin, Box 15966, Honolulu, Hawaii 96815.

FLORIDA — (SOUTHEAST) — DELRAY: Offices for lease in single story medical plaza adjacent to Interstate-95; busy intersection and newly built convalescent center; tremendous opportunity to grow with a rapidly growing middle class community of single-family and condominium dwellings. Contact: Lawrence M. Landis, 900 S. Congress Ave., Delray, Florida 33445. Phone: (305) 278-0062.

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WATER FRONT HOME — ST. JOHNS RIVER — ORANGE PARK: An interesting design concept with nearly every room facing the water with sliding glass doors to the river. Kitchen overlooks natural woods. Cement bulkhead and secluded. By appointment (904) 264-4407.

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MAY 23-27, 1979

105TH ANNUAL MEETING

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Florida Medical Association Annual Meeting, May 23-27, 1979

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**Contraindications:** Tablets in children under 6 months of age; known hypersensitivity; acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

**Warnings:** As with most CNS-acting drugs, caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Withdrawal symptoms (similar to those with barbiturates, alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal/muscle cramps, vomiting, sweating). Keep addiction-prone individuals (drug addicts or alcoholics) under careful surveillance because of predisposition to habituation/dependence.

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations, as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

ORAL: Advise patients against simultaneous ingestion of alcohol and other CNS depressants.

Not of value in treatment of psychotic patients; should not be employed in lieu of appropriate treatment. When using oral form adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increase in dosage of standard anticonvulsant medication; abrupt withdrawal in such cases may be associated with temporary increase in frequency and/or severity of seizures.

INJECTABLE: *To reduce the possibility of venous thrombosis, phlebitis, local irritation, swelling, and, rarely, vascular impairment when used I.V.: inject slowly, taking at least one minute for each 5 mg (1 ml) given, do not use small veins, i.e., dorsum of hand or wrist; use extreme care to avoid intra-arterial administration or extravasation. Do not mix or dilute Valium with other solutions or drugs in syringe or infusion flask. If it is not feasible to administer Valium directly I.V., it may be injected slowly through the infusion tubing as close as possible to the vein insertion.*

Administer with extreme care to elderly, very ill, those with limited pulmonary reserve because of possibility of apnea and/or cardiac arrest; concomitant use of barbiturates, alcohol or other CNS depressants increases depression with increased risk of apnea; have resuscitative facilities available. When used with narcotic analgesic eliminate or reduce narcotic dosage at least 1/3, administer in small increments. Should not be administered to patients in shock, coma, acute alcoholic intoxication with depression of vital signs.

Has precipitated tonic status epilepticus in patients treated for petit mal status or petit mal variant status.

Withdrawal symptoms (similar to those with barbiturates, alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal/muscle cramps, vomiting, sweating). Keep addiction-prone individuals under careful surveillance because of predisposition to habituation/dependence. Not recommended for OB use.

Efficacy/safety not established in neonates (age 30 days or less); prolonged CNS depression observed. In children, give slowly (up to 0.25 mg/kg over 3 minutes) to avoid apnea or prolonged somnolence; can be repeated after 15 to 30 minutes. If no relief after third administration, appropriate adjunctive therapy is recommended.

**Precautions:** If combined with other psychotropics or anticonvulsants, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of Valium (diazepam), *i.e.*, phenothiazines, narcotics, barbiturates, MAO inhibitors and antidepressants. Protective measures indicated in highly anxious patients with accompanying depression who may have suicidal tendencies. Observe usual precautions in impaired hepatic function, avoid accumulation in patients with compromised kidney function. Limit oral dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation (initially 2 to 2½ mg once or twice daily, increasing gradually as needed or tolerated).

INJECTABLE: Although promptly controlled, seizures may return, readminister if necessary; not recommended for long-term maintenance therapy. Laryngospasm/increased cough reflex are possible during peroral endoscopic procedures; use topical anesthetic, have necessary countermeasures available. Hypotension or muscular weakness possible, particularly when used with narcotics, barbiturates or alcohol. Use lower doses (2 to 5 mg) for elderly/debilitated.

**Adverse Reactions:** Side effects most commonly reported were drowsiness, fatigue, ataxia. Infrequently encountered were confusion, constipation, depression, diplopia, dysarthria, headache, hypotension, incontinence, jaundice, changes in libido, nausea, changes in salivation, skin rash, slurred speech, tremor, urinary retention, vertigo, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances and stimulation have been reported, should these occur, discontinue drug.

Because of isolated reports of neutropenia and jaundice, periodic blood counts, liver function tests advisable during long-term therapy. Minor changes in EEG patterns, usually low-voltage fast activity, have been observed in patients during and after Valium (diazepam) therapy and are of no known significance.

INJECTABLE: Venous thrombosis/phlebitis at injection site, hypoactivity, syncope, bradycardia, cardiovascular collapse, nystagmus, urticaria, hiccups, neutropenia.

In peroral endoscopic procedures, coughing, depressed respiration, dyspnea, hyperventilation, laryngospasm/pain in throat or chest have been reported.

**Management of Overdosage:** Manifestations include somnolence, confusion, coma, diminished reflexes. Monitor respiration, pulse, blood pressure, employ general supportive measures, I.V. fluids, adequate airway. Use levarterenol or metaraminol for hypotension, caffeine and sodium benzoate for CNS-depressive effects. Dialysis is of limited value.

**Supplied:** Tablets, 2 mg, 5 mg and 10 mg, bottles of 100 and 500; Tel-E-Dose® (unit dose) packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10. Ampuls, 2 ml, boxes of 10. Vials, 10 ml, boxes of 1; Tel-E-Ject® (disposable syringes), 2 ml, boxes of 10. Each ml contains 5 mg diazepam, compounded with 40% propylene glycol, 10% ethyl alcohol, 5% sodium benzoate and benzoic acid as buffers, and 1.5% benzyl alcohol as preservative.

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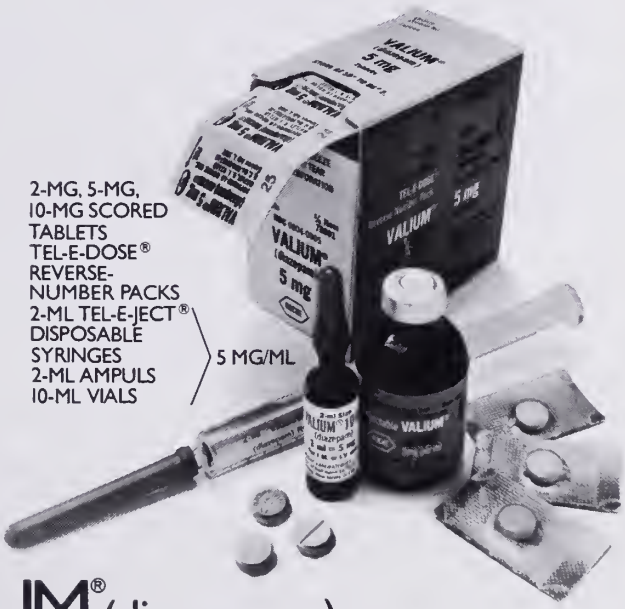


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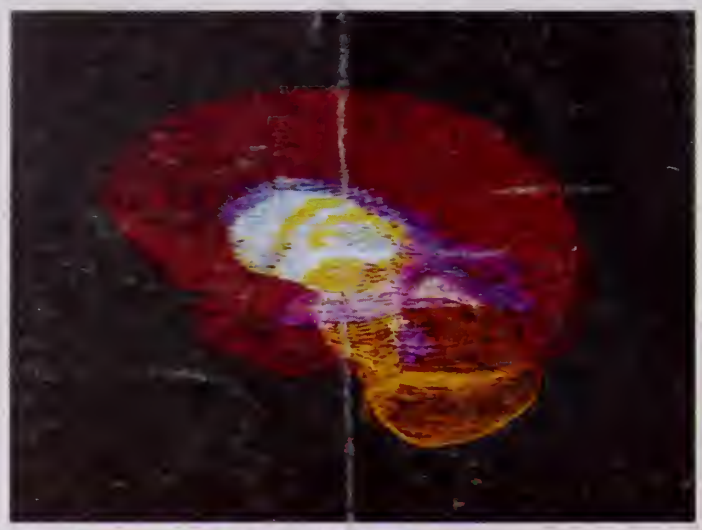

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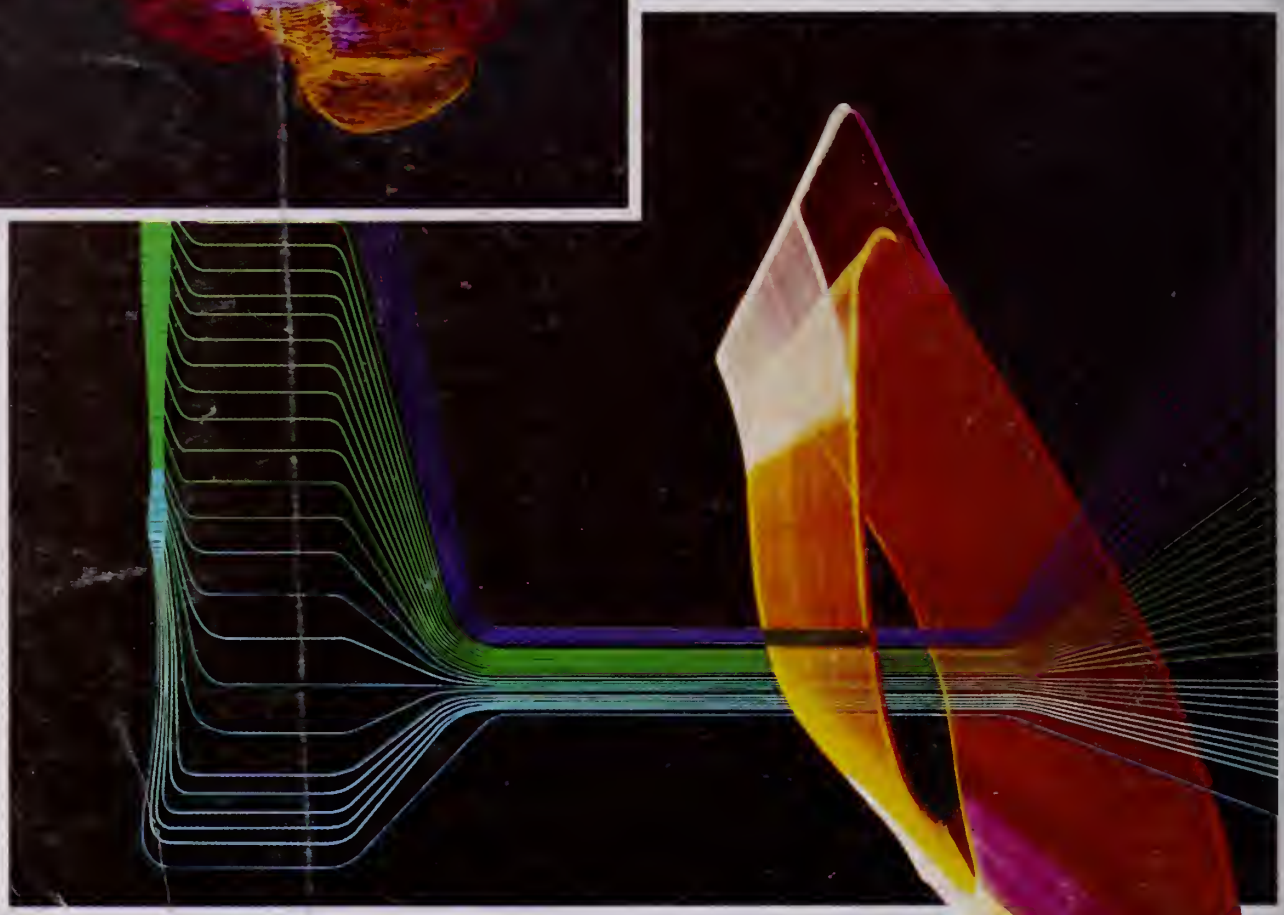

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The effectiveness of Valium in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

**Contraindicated:** Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.
**Warnings:** Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**
**Precautions:** If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.
**Side Effects:** Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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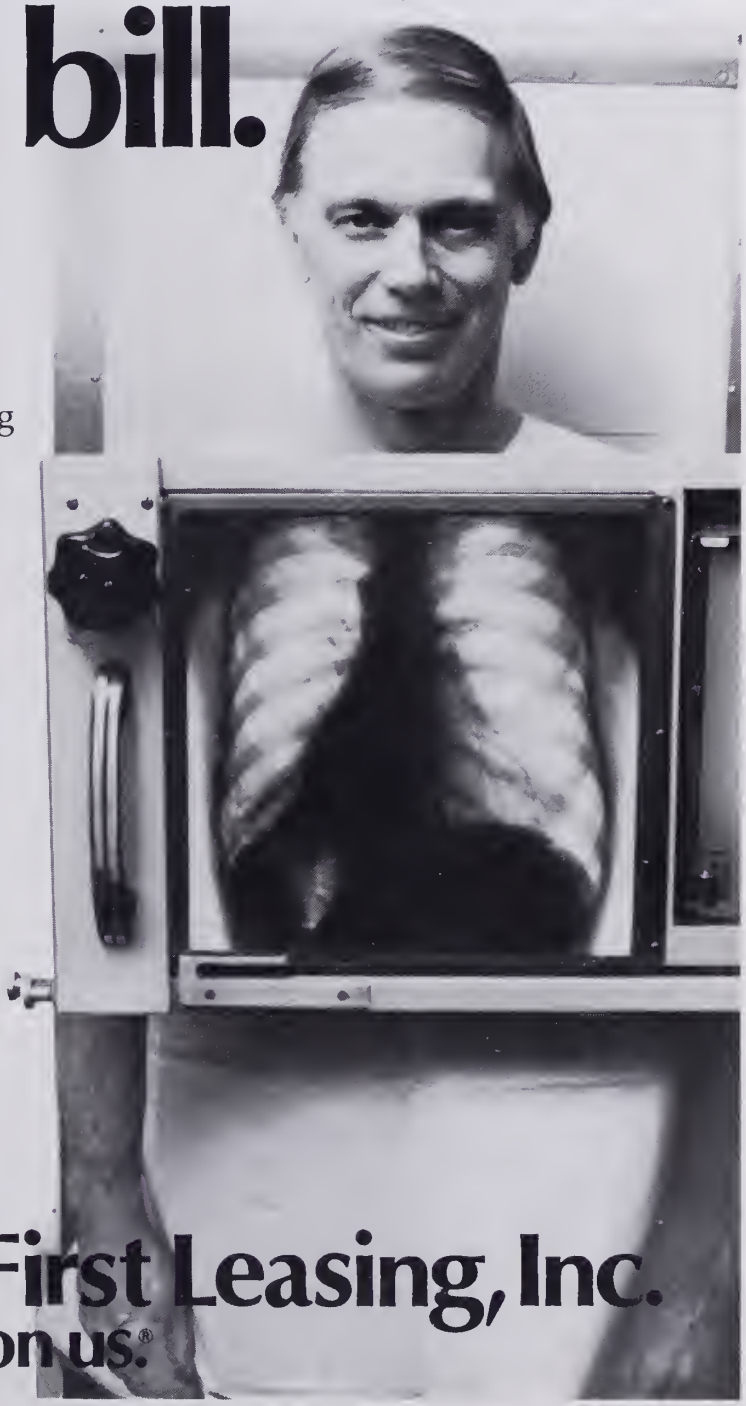

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MARCH COVER — This month's cover sketch by Amit Pieter, of Gainesville, highlights the lead article in this issue, "Lyme Arthritis in Florida," by Jerald M. Zakem, M.D. and Bernard F. Germain, M.D., page 281.

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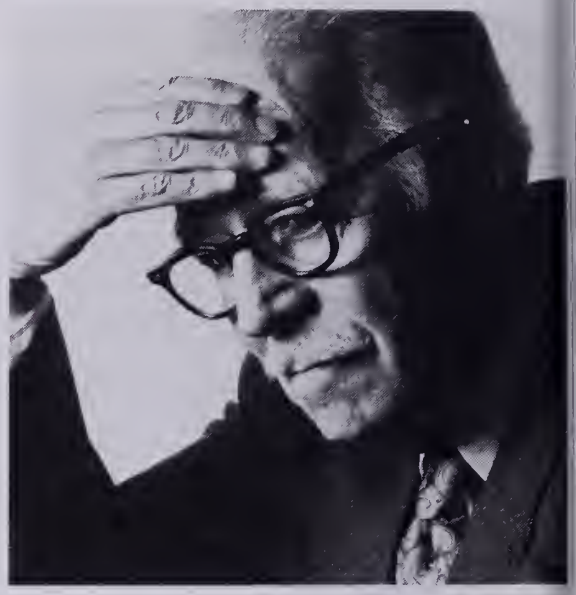

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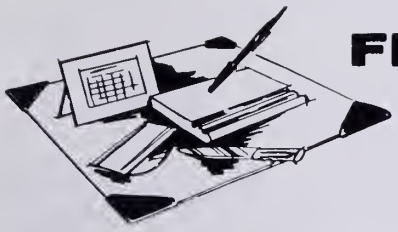
1. Shane, S.J.: Canadian Family Physician, November 1973. 2. Lemberg, L.: Practical Cardiology, February 1976.



# FROM THE EDITOR'S DESK

## HOUSE SUBCOMMITTEES

Many important legislative issues of importance to the Florida Medical Association will be considered by three newly-appointed subcommittees of the Florida House of Representatives. For the first time in several years a Subcommittee on Health has been established within the House Committee on Health and Rehabilitative Services. It will be chaired by Rep. Clyde Hagler (D-Escambia), and also will consist of Reps. Everett Kelly (D-Lake); David Lehman, M.D. (D-Broward); Larry Plummer (D-Dade); and Virginia Rosen (D-Dade).

## CONTAINMENT & REFORM

A Select Subcommittee on Health Care Cost Containment will be chaired by Rep. Carl Ogden (D-Duval) and will function under the House Committee on Regulatory Reform. Other members will be: Reps. Gene Campbell (D-Palm Beach); Pete Dunbar (R-Pinellas); Elaine Gordon (D-Dade); and Gwen Margolis (D-Dade). Rep. Elaine Gordon (D-Dade) will head Subcommittee A of the Regulatory Reform Committee. The group will be responsible for consideration of the State Board of Medical Examiners under the "Sunset Law". Other subcommittee members are: Reps. Gene Campbell (D-Palm Beach); Linda Cox (D-Broward); Pete Dunbar (R-Pinellas); Arnett Girardeau (D-Duval); Ron Johnson (D-Bay); and Carl Ogden (D-Duval).

## COST CONTAINMENT

The Health Subcommittee of the House HRS Committee and the Select Subcommittee on Health Care Cost Containment are working together to develop state cost containment legislation. They have already taken some testimony in Tallahassee and have scheduled a series of hearings around the State. Several witnesses — notably representatives of the Health Insurance Association of America and the State Health Coordinating Council — have called for creation of a commission to regulate hospital rate increases. Opposing this approach was Joe Stansell, Vice President of Blue Shield of Florida.

## GORDON BILLS

State Sen. Jack Gordon (D-Dade) has dropped in the legislative hopper a package of bills that are likely to win few supporters among health care providers. One Gordon bill of note would require hospitals to make available to anyone upon request a performance record on each staff surgeon. The record would show the number, type and success rate of all operative procedures within the past 10 years, complaints by patients and malpractice suits. Meanwhile, Rep. Richard S. Hodes, M.D. (D-Hillsborough) has filed a repealer to a 1978 state law requiring hospitals to offer cervix and breast examinations for female patients over 18.

## UNRELATED INCOME

The Internal Revenue Service has assessed the Florida Medical Association $18,888.61 in taxes plus interest for the years 1976 and 1977. The taxation was on what the IRS claimed to be "unrelated income" taken in by FMA during those years. The assessment involved $90,857.91 in *Journal of the Florida Medical Association* income from advertising; sales of the *Florida Medical Directory* and the *Relative Value Study;* and rental income.

## ABORTION CLINIC

A Tallahassee abortion clinic has won a favorable ruling from the Fifth U.S. Circuit Court of Appeals in its suit against six area physicians. The appellate court, reversing a judgement by District Judge William Stafford, stated the physicians — most of them on the obstetrics and gynecology staff of Tallahassee Memorial Hospital — will have to stand trial. The Feminist Women's Health Center accused the doctors of trying to monopolize the abortion market in the Tallahassee area.

## SURGEON GENERAL'S REPORT

AMA has urged physicians to assume a leadership role against cigarette smoking by setting personal examples and by dispensing advice on the health hazards of smoking. The AMA's appeal was in reaction to a new Surgeon General's Report, a review of 30,000 scientific articles which once again establishes a link between smoking and cancer and other chronic diseases.

**The Editor**

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**Tenuate Dospan®**
(diethylpropion hydrochloride NF) controlled-release

**AVAILABLE ONLY ON PRESCRIPTION**
**Brief Summary**

**INDICATION**: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

**CONTRAINDICATIONS**: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

**WARNINGS**: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. *Drug Dependence*: Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy*: Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children*: Tenuate is not recommended for use in children under 12 years of age.

**PRECAUTIONS**: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

**ADVERSE REACTIONS**: *Cardiovascular*: Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System*: Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal*: Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic*: Urticaria, rash, ecchymosis, erythema. *Endocrine*: Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System*: Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous*: A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

**DOSAGE AND ADMINISTRATION**: Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in midevening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.

**OVERDOSAGE**: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

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*Direct Medical Inquiries to*
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References: 1. Citations available on request — Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M. A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

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8-3921 (Y587A)

# Whether overweight is a complicating factor... or just uncomplicated overweight.

# Tenuate® Dospan® ⓒIV

## (diethylpropion hydrochloride NF)

**75 mg. controlled-release tablets**

### A useful short-term adjunct in an indicated weight loss program.

Overweight patients in certain diagnostic categories often require strict obesity control. Diethylpropion hydrochloride has been reported useful in obese patients with hypertension, symptomatic cardiovascular disease, or diabetes. While it is not suggested that Tenuate in any way reduces these complications in the overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. (Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.)

### In uncomplicated obesity.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

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The anorexic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.[1] And the unique chemistry of Tenuate provides "..anorexic potency with minimal overt central nervous system or cardiovascular stimulation."[2] Compared with the amphetamines, diethylpropion has minimal potential for abuse.

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For prescribing information see opposite page

# The evidence of experience

Since October 1974 when Motrin® (ibuprofen) was introduced in the United States, it has been used by more than 6,000,000 patients with rheumatoid arthritis* or osteoarthritis. Rarely has an ethical pharmaceutical product been prescribed for so many patients in so short a time. In addition, more than 450 studies presenting new data related to Motrin have been published.

The 6,000,000 patients already treated with Motrin is an objective measure of physicians' confidence in the ability of Motrin to relieve the pain and inflammation associated with rheumatoid arthritis and osteoarthritis.

So it is not surprising that in this short period Motrin has become the most frequently prescribed alternative to aspirin. Motrin relieves joint pain and inflammation as effectively as indomethacin or aspirin, but causes significantly fewer CNS and milder GI reactions. However, gastrointestinal bleeding, sometimes severe, has been associated with Motrin, aspirin, indomethacin, and other nonsteroidal antiarthritic agents.

*The safety and effectiveness of Motrin have not been established in patients with Functional Class IV rheumatoid arthritis (incapacitated, largely or wholly bedridden, or confined to wheelchair; little or no self-care).

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# Motrin 400 mg TABLETS
## ibuprofen, Upjohn

The confidence that comes from experience—
one more reason to prescribe Motrin.

Please turn page for a brief summary of prescribing information.

**Upjohn** The Upjohn Company, Kalamazoo, Michigan 49001

I-6857 4

The confidence that comes from experience—
one more reason to prescribe

# Motrin 400 mg TABLETS
## ibuprofen, Upjohn

**Indications and Usage:** Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

**Contraindications:** Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

**Warnings:** Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

**Precautions:** Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

**Drug interactions.** *Aspirin* used concomitantly may decrease Motrin blood levels. *Coumarin:* Bleeding has been reported in patients taking Motrin and coumarin.

**Pregnancy and nursing mothers:** Motrin should not be taken during pregnancy or by nursing mothers.

### Adverse Reactions

*Incidence greater than 1%*

**Gastrointestinal:** The most frequent type of adverse reaction occurring with Motrin (ibuprofen) is gastrointestinal (4% to 16%). This includes nausea*, epigastric pain*, heartburn*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness*, headache, nervousness. **Dermatologic:** Rash* (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

Incidence: Unmarked 1% to 3%; *3% to 9%.

*Incidence less than 1 in 100*

**Gastrointestinal:** Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

*Causal relationship unknown*

**Gastrointestinal:** Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

**Overdosage:** In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

**Dosage and Administration:** Suggested dosage is 300 or 400 mg t.i.d. or q.i.d. Do not exceed 2400 mg per day.

### How Supplied

| | |
|---|---|
| **Motrin Tablets, 300 mg** (white) | |
| Bottles of 60 | NDC 0009-0733-01 |
| Bottles of 500 | NDC 0009-0733-02 |
| **Motrin Tablets, 400 mg** (orange) | |
| Bottles of 60 | NDC 0009-0750-01 |
| Bottles of 500 | NDC 0009-0750-02 |
| Unit-dose package of 100 | NDC 0009-0750-06 |
| Unit of Use bottles of 120 | NDC 0009-0750-26 |

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# Dean's Page

# Whoa!

**William B. Deal, M.D.**

One of the earliest records of exogenous regulations imposed upon mankind dates back to 1200 B.C. when Moses received the Ten Commandments. Since then, man himself has generated volumes that in one way or another paraphrase the Original Ten.

To us, in medicine, it seems that regulations are multiplying faster than geometric progression. Regulations are meant to be statements of clarification concerning laws, but in many instances have confused the issues. While Congress passes only about 200 laws per year, the number of regulations emanating from federal departments and agencies has increased from 9,600 in 1950 to 20,000 in 1970 and to 60,000 in 1975. In order to comply with the regulations, there were 5,146 different types of approved government forms in mid-1974. This excludes tax and banking forms. The current number surely is greater. (Perhaps additional employees are still counting the forms generated since 1974!)

It certainly should come to no one's surprise that the cost of compliance has contributed to inflation and hospital costs. Let's review just a few examples:

1. In Maryland, a Mandatory Medical Management Information System is being installed by every hospital in the state. The initial cost is between $2 and $3 million. The estimated annual operating cost is $1.2 million.
2. The American Hospital Association estimates the cost of conversion to the System of Hospital Uniform Reporting (SHUR) will be $100,000 per hospital.
3. PSRO costs are estimated to be $1.2 billion annually.
4. The rate review commission being discussed in Florida would require an operating budget of $1.7 million annually.
5. HEW handicapped regulations will cost existing hospitals $200 million to comply.
6. To be in full compliance with the life safety code of the National Fire Protection Association, each hospital would have to spend over $1 million. Code compliance is required for Medicare participation, JCAH accreditation and many state laws.

Knowledgeable people have estimated the direct costs of regulation including the cost of compliance, to be at least $100 billion annually. The indirect costs would dramatically increase this figure.

It is curious, indeed, that rising costs have paralleled the increase in regulations on the health care industry. Did regulations increase costs or did costs generate regulations? That question could be answered by nonbiased economists — in time. A moratorium on regulatory activities might just cool inflation and allow us to get on with the job of treating sick people.

Viscount Falkind, in a *Discourse of Infallibility*, said "When it is not necessary to change, it is necessary not to change."

Dr. Deal is Vice President for Health Affairs and Dean, University of Florida College of Medicine, Gainesville.

● Dr. Deal, University of Florida College of Medicine, Gainesville 32610.

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Pfizer PHARMACEUTICALS

# LEGISLATIVE NEWS

Several items of legislation enacted by the 1978 Florida Legislature are of particular interest to Florida physicians. The FMA Capital Office has summarized some of the most important ones. The following is the second in a series of summaries of these laws.

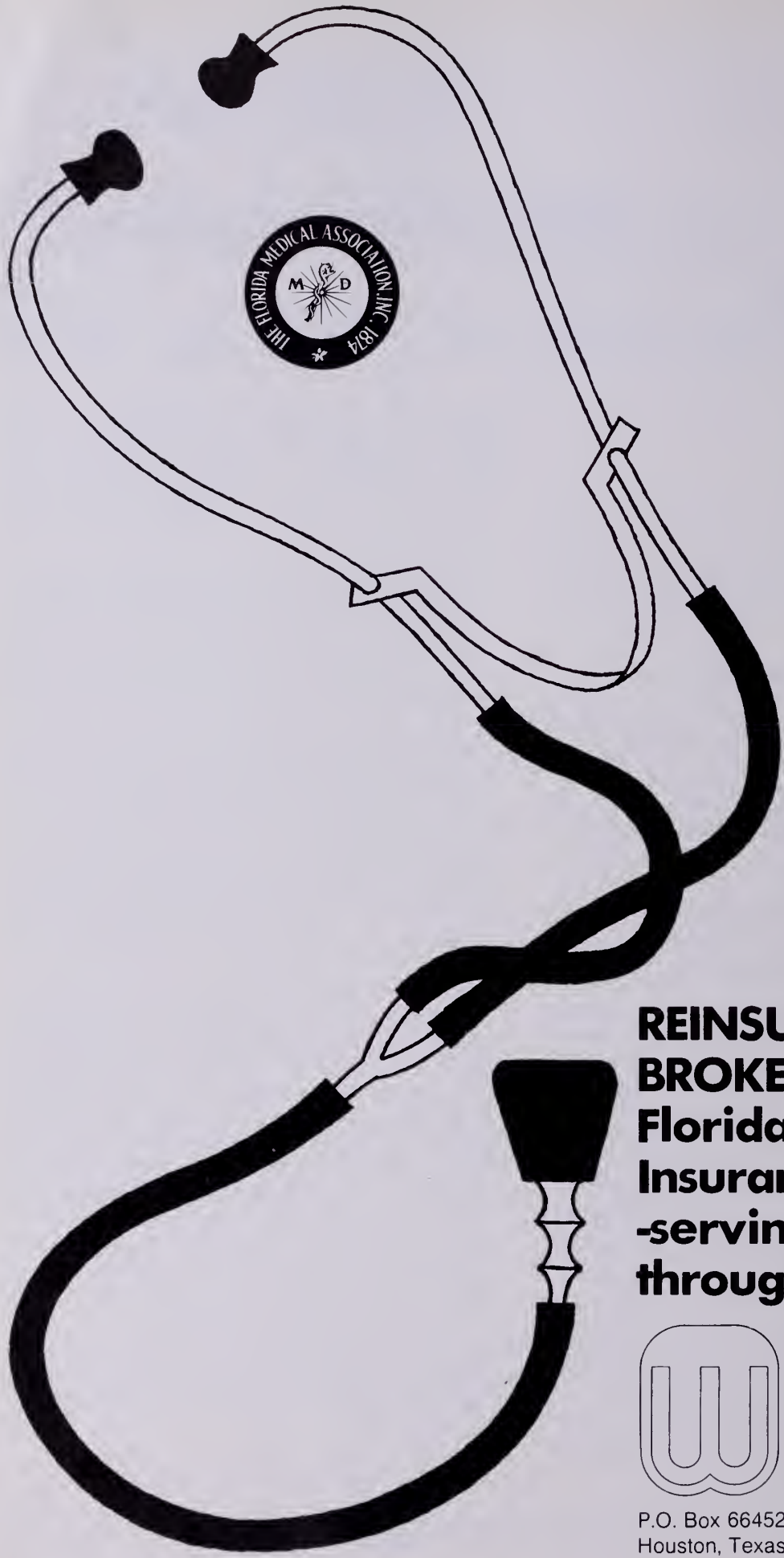
### SB 3-D — Workmen's Compensation

In reviewing the provisions in SB 3-D, Workmen's Compensation, it is interesting to note that the entire W-C Chapter will be repealed effective July 1, 1979 unless the Legislature acts before that date. This forces the 1979 Session to consider the entire issue again.

Major concepts enacted by passage of SB 3-D include:

1. Exemption from Workmen's Compensation law for employers with less than three employees.
2. With regard to individual practitioners:
   a. Requires the practitioner furnish to the division and the self insured employer or the carrier a sworn statement declaring that the facts alleged in the report are true, and that the treatment and services rendered were reasonable and necessary with respect to the bodily injury sustained.
   b. Empowers the Division of Labor of the Department of Commerce to investigate hospitals and medical practitioners to determine if they are in compliance with the fee schedule or are requiring unjustified utilization. Offenders will receive no payment for such services.
3. Concerning hospital fees, SB 3-D:
   a. Requires the division to adopt hospital fee schedules based on hospital charges which prevail in the same community for similar treatment of injured persons of like standard of living.
   b. Creates an advisory committee to assist the Department of Commerce in developing a hospital fee schedule.
4. A reduction in benefits to those employees who receive a permanent partial disability rating of 10% or less as follows:
   a. 0-10% disability ratings would be paid up to 175 weeks instead of 350 weeks which would reduce benefits to those workers who are not as seriously injured.
   b. 11-50% disability ratings would be paid up to 350 weeks or would remain the same as under present law.
   c. 51-99% disability ratings would be paid up to 525 weeks instead of 350 weeks and would increase benefits to the severely injured worker.
5. Provides that the Judge of Industrial Claims may not make a finding of, or award compensation for, a disability for physical impairment which is greater than the greatest disability given the claimant by any examining or treating physician, except upon stipulation by the parties.
6. Raising the penalty for fraud from a first degree misdemeanor to a third degree felony. It also inserts into Section 440.37 an extensive anti-fraud provision similar to the insurance fraud law. The amendment provides that claim forms shall contain a notice of the penalty for fraud, and provides that medical practitioners and attorneys who assist or conspire with any person to violate the provisions of Chapter 440 shall be guilty of a third degree felony and that the medical practitioners shall be subject to sanction by the appropriate licensing authority. It also provides penalties for hospitals and their agents which violate the anti-fraud provisions. The amendment forbids "running" by attorneys and others.
7. Provision for a joint legislative committee to study the Workmen's Compensation system and report to the Legislature on March 1, 1979. Appropriates $150,000 for this purpose.

*(To be continued next month.)*

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**Indications:** For the symptomatic relief of bronchospastic conditions such as bronchial asthma, chronic bronchitis, and pulmonary emphysema

**Warnings:** Do not administer more frequently than every 6 hours, or within 12 hours after rectal dose of any preparation containing theophylline or aminophylline. Do not give other compounds containing xanthine derivatives concurrently.

**Precautions:** Use with caution in patients with cardiac disease, hepatic or renal impairment. Concurrent administration with certain antibiotics, i.e., clindamycin, erythromycin, troleandomycin, may result in higher serum levels of theophylline. Plasma prothrombin and factor V may increase, but any clinical effect is likely to be small. Metabolites of guaifenesin may contribute to increased urinary 5-hydroxyindoleacetic acid readings, when determined with nitrosonaphthol reagent. Safe use in pregnancy has not been established. Use in case of pregnancy only when clearly needed.

**Adverse Reactions:** Theophylline may exert some stimulating effect on the central nervous system. Its administration may cause local irritation of the gastric mucosa, with possible gastric discomfort, nausea, and vomiting. The frequency of adverse reactions is related to the serum theophylline level and is not usually a problem at serum theophylline levels below 20 mcg/ml.

**How Supplied:** Capsules in bottles of 100 and 1000 and unit-dose packs of 100; Liquid in bottles of 1 pint and 1 gallon.

*See package insert for complete prescribing information.*

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# Professional Liability Legal Update

### State's Authority to Prohibit Medical Treatment

The First District Court of Appeal was recently asked to decide to what extent the State of Florida has the constitutional authority to prohibit a non-harmful mode of medical treatment by a licensed physician after full disclosure to, and election by, a patient. The petitioner, a practicing physician in Brevard County, had been ordered by the Brevard County Medical Society ("BCMS")to discontinue the practice of chelation therapy. Chelation therapy, which is used in the treatment of vascular occlusive disease, consists of a infusion of a chelating agent (generally $Na_2$ EDTA) into the blood stream over several hours, a treatment which is repeated approximately 20 times over a period of a month or more.

Petitioner refused to discontinue the therapy and was expelled from the BCMS. Persuant to Section 458.1201(1)(p) Florida Statutes, the BCMS reported the expulsion to the Florida State Board of Medical Examiners ("Board"), which issued an administrative complaint. Following a hearing by the Board, petitioner was reprimanded, placed on probation for one year and ordered to immediately cease and desist from utilizing chelation therapy in the treatment of arteriosclerosis unless and until authorized by the Board. Review was then sought in the District Court.

The District Court recognized at the outset that the State has the authority, even the duty, to control admission of persons to the practice of medicine and to prevent incompetent doctors from injuring patients. In that regard it was stressed that in this case, neither the BCMS nor the Board has made any finding that chelation therapy was in any respect harmful or hazardous to the patient. Rather, the Board's decision appeared to have been based upon a determination that chelation therapy is "quackery under the guise of scientific medicine." Furthermore, the record revealed that petitioner never claimed that chelation therapy was a cure for arteriosclerosis. Indeed, the evidence showed that the petitioner allowed his patients to make their own choice of treatment after full disclosure that chelation therapy had not been proved effective and was held in disfavor by the mainstream of the medical community.

Noting that it was not dealing with a controlled substance such as enumerated in Section 893.03 Florida Statutes, the Court held that under Article I, Section 2 of the Constitution of the State of Florida , in the absence of a demonstration of unlawfulness, harm, fraud, coercion or misrepresentation, the Board is without authority to deprive petitioner's patients of their voluntary election to receive chelation therapy simply because that mode of treatment has not received the endorsement of a majority of the medical profession. *Rogers v. State Board of Medical Examiners of Florida* (Case No. EE-54, Jan. 9, 1979).

### Statute of Limitations — Mediation Proceedings

The section of the Florida Medical Mediation Statute providing that a party shall have 60 days from the date on which the jurisdiction of the mediation panel terminates in which to file a complaint in circuit court, does not shorten the applicable statute of limitations. The effect of the 60-day provision is to extend the applicable statute of limitations up to 60 days after termination of the mediation proceeding in those cases in which less than 60 days remain on the statute of limitations. *Chambers v. Gaul* 365 So. 2nd 213 (Fla. 4th DCA 1978).

### Negligence — Res Ipsa Loquitur

A patient sued her surgeon, anesthesiologist and hospital alleging that her back was negligently injured while she was in the operating room undergoing surgery on her hand. Liability of the hospital was based upon the doctrine of res ipsa loquitur.

In her complaint, the patient alleged that her spinal disc was ruptured while she was in the exclusive control of the hospital's employees. She asserted that the doctrine of res ipsa loquitur applies where (1) the plaintiff is in defendant's exclusive control, and (2) the injury would not have occurred in the absence of negligence. The hospital argued that the doctrine did not apply because the patient was also under the control of the anesthesiologist and surgeon, and, therefore, she was not in the exclusive control of the hospital when her injury occurred.

The trial court granted summary judgment for the hospital. The District Court reversed, holding that if the patient could prove at trial that her injuries did occur in the operating room then someone in the operating room was negligent, and, if the negligence occurred when the patient was in the control of the hospital, then the doctrine of res ipsa loquitur applied. *Troupe v. Evans* (Fla. 1st DCA, Case Nos. II-415, II-417, Jan. 11, 1979).

---

Prepared and submitted by John E. Thrasher, J.D., Vice President and Legal Counsel and Anthony J. McNicholas, III, J.D., Associate Legal Counsel, Professional Insurance Management Co. (PIMCO), Jacksonville, Florida.

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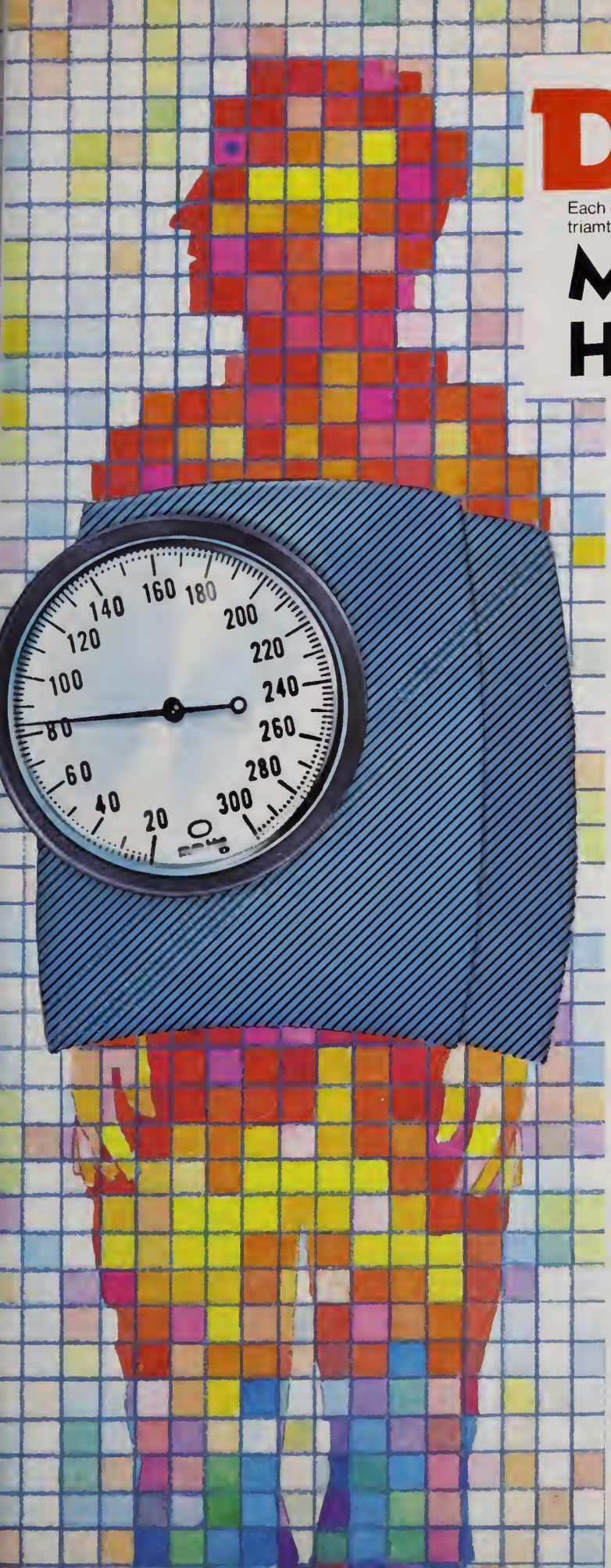

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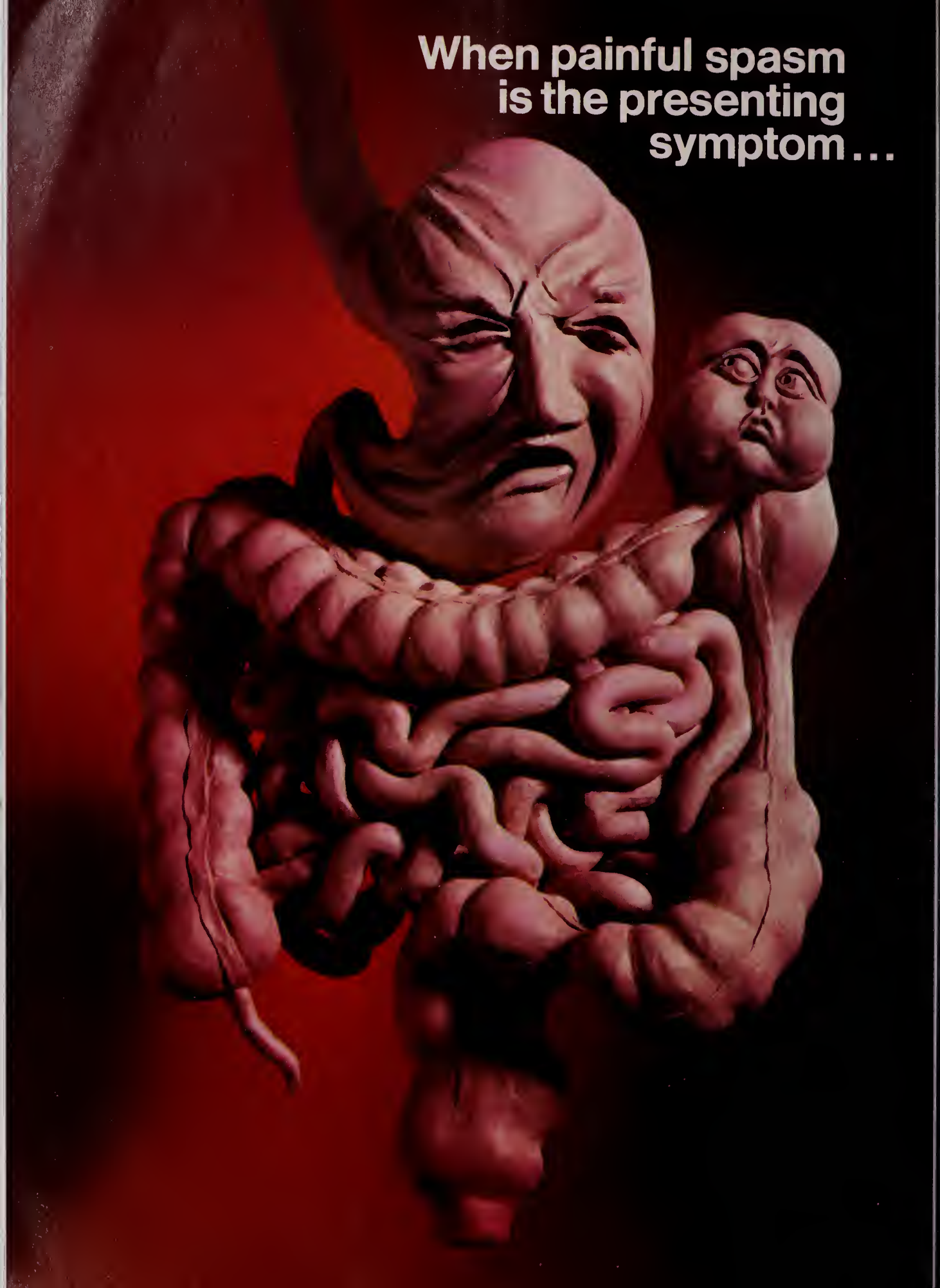
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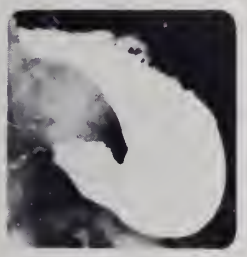

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King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

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# Lyme Arthritis in Florida

Jerald M. Zakem, M.D.
and Bernard F. Germain, M.D.

**Abstract: Lyme arthritis is a syndrome which has been described in Connecticut and the immediate area. It consists of a characteristic skin rash (erythema chronicum migrans) followed by a pauciarticular arthritis. It may also be accompanied by other systemic manifestations. Diagnosis requires a careful travel history for the patient seen outside the endemic area.**

Some diseases are endemic to one geographic area. With the modern expedience of jet transportation and the increase in leisure activity, a person may contact a disease in one area and seek medical care in a different area. The occurrence of an outbreak of a distinctive skin rash and arthritis has recently been described in and around the eastern Connecticut communities of Lyme, Old Lyme, and East Haddam.[1] We recently saw a young male who developed this syndrome upon return from the endemic area.

## Case Report

A 13-year-old white male presented to the Children's Arthritis Clinic at All Children's Hospital in St. Petersburg in October 1977 with a two year history of arthritis of the elbows, knees, and ankles. This developed in late summer of 1975 on his return from Mystic, Connecticut, where he spends his summers. The week before leaving the area a red lesion developed on his left thigh which he describes as increasing in size with clearing of the center. Several similar lesions developed on his legs and one arm while the original lesion was still present. He does not recall any insect bites; however, he lived in a heavily wooded area while in Connecticut. These lesions were still present on his return to Florida. He was treated with an antibotic. The lesions cleared completely. One month later he noted arthralgias of his right elbow and right knee. He had no fever, chills or night sweats. The knee became swollen, warm, and painful. He was seen by an orthopedic surgeon who aspirated his knee on two occasions and injected corticosteroids. Despite this the effusion recurred, and in May 1976 he ws referred to a rheumatologist. Laboratory results at that time include a normal complete blood count and erythrocyte sedimentation rate, and negative antinuclear antibody and rheumatoid factor. The condition was diagnosed as pauciarticular juvenile rheumatoid arthritis and he was started on 12 adult aspirin daily (3.6 gm) with improvement of the synovitis of his right knee. He became eratic in taking his medication and developed an episode of swelling of the right ankle. This resolved on resumption of full doses of salicylates. Four months later another effusion of his right knee developed. At this time 200 cc of fluid were withdrawn and a corticosteroid preparation was injected. The joint fluid was described as having a poor mucin clot. Cultures were negative. The cell count

**Table 1. — Manifestations of Lyme Arthritis**

**Most Common**

- **Skin rash**
- **Olgioarthritis**

**Less Common**

- **Fever and malaise**
- **Lymphadenopathy**
- **Sore throat**
- **Splenomegaly**
- **Cardiac conduction abnormalities**
- **Headache and stiff neck**

---

This presentation was delivered in part at the Florida Medic ıl Association's 104th Annual Meeting, May 3-7, 1978, at Hollywood.

Dr. Zakem is Advanced Subspecialty Resident in Rheumatology in the Department of Internal Medicine and Dr. Germain is Director, Division of Rheumatology, Departments of Internal Medicine and Pediatrics, University of South Florida College of Medicine, Tampa.

revealed 11,400 white cells per cubic millimeter — 85% polymorphonuclear, 15% mononuclear. Synovial fluid glucose was 67 mg%; no concomitant blood glucose was obtained. Protein was 4.7 gm%. Salicylate level at this time was adequate. He did well until the summer of 1977 at which time pain and stiffness developed in his right elbow and right wrist. He had become somewhat lax in taking salicylates and these symptoms resolved on resuming a full dose. When examined in the fall of 1977, his physical examination was normal. He has had no recurrence of the arthritis or skin rash.

**Table 2. — The Arthritis of Lyme Arthritis**

**Sudden onset**
**Three or less joints**
**Large joints predominate**
**Short duration**
**Recurrent attacks**
**Well between attacks**

## Discussion

A new syndrome has been described recently, initially in adjacent communities in eastern Connecticut and subsequently from the surrounding area. This syndrome consists of a pauciarticular arthritis and a characteristic skin rash. Since many of the initial patients were children, the condition was originally diagnosed as juvenile rheumatoid arthritis. However, because of characteristics of the disease to be pointed out, it was believed that these patients had a new syndrome which was subsequently named Lyme arthritis.

The arthritis is of sudden onset. It lasts a short time, less than a week in some cases and typically involves the large joints with the knee most commonly affected. Other frequently involved joints include the elbow, ankle, wrist, shoulder, and temporomandibular. Even though the first attack is usually of short duration, some attacks persist for as long as six months. Commonly the patient has one or more (average of three) recurrent attacks. The interval between attacks ranges from 4-24 months. In the interim the patient may have short periods of arthralgias without definite joint swelling. The arthritis typically occurs four weeks after onset of the skin lesion; however, it may occur while the skin lesions are still present or it may not develop until several months later. Laboratory evaluation usually includes an elevated sedimentation rate with a normal hemoglobin, hematocrit and white blood cell count. Chemical profile is also within normal limits. Tests are negative for antinuclear antibodies and rheumatoid factor. Serum complement is depressed in approximately half the patients tested. Radiologically the joints show only soft tissue swelling; bony destruction has not been reported. Joint fluid examination reveals an elevated white blood cell count (median 26,000 cells per cubic millimeter) predominately polymorphonuclear leukocytes. The protein is usually elevated and the fluid glucose concentration and complement level are within the normal range. Synovial biopsy shows hypertrophy, vascular proliferation, and a marked infiltration by mononuclear cells.[2]

The skin rash is typical of erythema chronicum migrans. This skin lesion was originally described in Scandinavia[3] and is endemic in that area. The first report in this country appeared in 1970.[4] There was a clustering of cases without arthritis recently described from Connecticut.[5] The lesions may be single or multiple and usually occur on an extremity or on the trunk. It begins as a red macule or papule which expands to form a large annular lesion. The lesion typically has an erythematous border and central clearing, although the entire lesion may remain red. The skin lesion lasts from a few days to eight weeks. Some patients remember an insect bite, either tick or mosquito, prior to the lesion developing; however, this is not always the case. The lesion may be warm to the touch. On resolution there may be some residual pigmentary changes. The skin lesions do not recur with subsequent attacks of the arthritis.[2]

Other signs and symptoms that may occur in conjunction with either the skin rash or the arthritis include fever, malaise, regional lymphadenopathy, headache, sore throat, and stiff neck. Other less commonly seen manifestations include splenomegaly, cardiac conduction defects, and aseptic meningitis.

The cause of Lyme arthritis and erythema chronicum migrans is unknown. Its mode of transmission appears to best fit an arthropod-borne infection,[2] although not all patients remember an insect bite. The etiologic agent has not been discovered. Routine bacteriologic and fungal cultures are negative in all cases, and serologic tests to known viral agents are inconclusive. Febrile agglutinins and rickettsial serology have been positive in some patients, but negative in others.

The etiology of the arthritis following the skin lesions may be related to circulating immune complexes. Cryoimmunoglobulins have been found in the sera of those patients with erythema chronicum migrans in whom arthritis subsequently developed and also have been found in patients with active arthritis.[6] Cryoimmunoglobulins were not found in patients with skin lesions who did not develop arthritis.

Pauciarticular juvenile rheumatoid arthritis was diagnosed in our patient and many patients in the original series. Several characteristics differentiate the two diseases. Foremost is the history of travel to the endemic area. The characteristic skin lesion is present in 70% of the patients with Lyme arthritis.[2] The effusion and joint symptoms in Lyme arthritis are usually of more sudden

onset than juvenile rheumatoid arthritis. There may be more effusion than pain and the effusion usually resolves more rapidly in Lyme arthritis than would be expected in juvenile rheumatoid arthritis. Other differential points include the lack of female predominance expected in juvenile rheumatoid arthritis and other associated symptoms of Lyme arthritis such as neurologic and cardiac involvement. It has also been pointed out that morning stiffness is infrequent in Lyme arthritis.[7]

Therapy for this entity remains unsettled. Patients with erythema chronicum migrans have been treated with various antibiotics; however, there are no controlled studies to suggest that antibiotics alter the course of the skin disease. Some patients in the initial series developed Lyme arthritis despite the administration of penicillin for the skin lesions.[1] Therapy of the arthritis includes aspirin for symptomatic relief. Most patients experience resolution within a week. Several patients have had persistent effusions despite salicylates and intra-articular steroids, requiring synovectomy to control the disease.[2]

## Conclusion

We have presented a young man in whom a newly described arthritic syndrome endemic to the area bordering Long Island Sound developed. It is characterized by a preceding skin lesion (erythema chronicum migrans) and pauciarticular arthritis. The arthritic symptoms are commonly recurrent but of short duration and resolve without sequella. It is important to consider this entity in the differential diagnosis of a child presenting with a monoarticular or pauciarticular arthritis.


## Acknowledgement

The Children's Arthritis Clinic is supported by the Florida Chapter of the Arthritis Foundation.


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# Investigational Chemotherapy of Neuroblastoma

Lawrence Helson, M.D.

Medical appreciation of neuroblastoma dates back to 1864 when Virchow proposed it to be a result of abnormal nervous system growth. Sixty years elapsed until Wright and Herxheimer established its neural origin. This histiological perspective indicates that neuroblastoma has been investigated for over 110 years and we are only now beginning to approach solutions and to formulate the various problems it poses. For example, the tumor originates from neural crest cells which usually migrate to form the sympathetic nervous system. It follows that tumors may occur anywhere from the superior cervical ganglia down the sympathetic chain to the bladder.

In clinical practice, these tumors are most frequently found in the posterior portion of the body in the adrenal medulla or the para-aortic sympathetics. Reasons for this aggregation are unknown. Another unresolved problem is the definition of tumors with different natural histories all arising in the same anatomic region. For example, a child whose chest was radiographed three years before diagnosis demonstrated a mediastinal neuroblastoma of a slow growing nature (in retrospect). At diagnosis, the tumor had not changed in size but suddenly after these years metastatic disease developed which was rapidly growing. Other patients are diagnosed with tumors in the same anatomic region and have a fulminating course. The existence of occult tumors and clarification of this issue may be helped by the usage of computerized axial tomography (CAT) scans. Several cases of tumor in the liver, around the kidneys and in the skull have been demonstrated with this apparatus. The distribution of metastases is generally accepted to be the bones, lymph nodes, and liver, but the reason that singular sites are involved and others are not involved remains unanswered. Using selective angiography, tumor localized in the maxillary antrum and one of the branches of the temporal artery was demonstrated (Fig. 1). Although 'haphazard' metastases are not unknown, there is good histological evidence for a predilection for certain sites. Orbital metastases are common and are the presenting sign in about 12% of patients. These may range from rapidly growing tumors to slow growing but locally destructive tumors. These may take months to develop erosions of the orbital bones (Fig. 2). When patients manifest proptosis, the amount of disease may range from retrobulbar soft tissue metastases without bone involvement to extensive destruction. Testicular metastases are uncommon but should be carefully looked for since swellings and solid infiltrates are easy to detect. Of interest but totally unresolved is the obvious rare occurrence of metastases to certain organs such as the lung, kidney, brain, heart, peripheral sympathetic nervous system and the contralateral adrenal medulla.

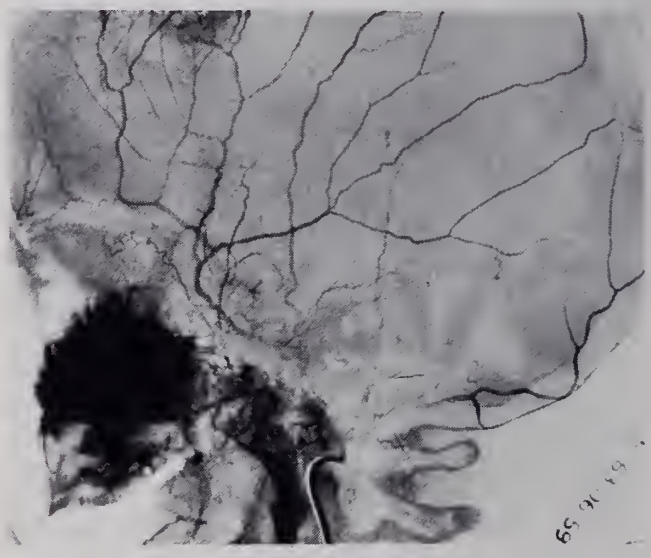

**Fig. 1. — Tumor involving the maxillary antrum and a branch of the temporal artery, demonstrated by percutaneous femoral angiography.**

## Investigative Methods

Some investigative methods have been established to further elucidate and possibly to resolve the problems of neuroblastoma dissemination. These include the establishment of human neuroblastoma cells in cell cultures as well as their inoculation in nude mice. This

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**Fig. 2. — Computerized transaxial tomography of the head. This section shows orbital destruction.**

human animal tumor model is a prototype of metastatic neuroblastoma in humans. The nude mouse is a genetic mutant with a recessive gene for fragile hair production and a rudimentary hypofunctional thymus. This renders them T-cell deficient and incapable of rejecting foreign tissues. Under appropriate conditions, virtually any kind of tumor can become a heterotransplant. As prerequisite the tumor must have the capability to proliferate and to develop a blood supply from the host. Neuroblastoma metastases in the bone marrow of children can be aspirated and inoculated subcutaneously into nude mice. Within 3-5 weeks tumor growth occurs; as the tumor enlarges it utilizes the blood vessels of the host to supply its nutrients (Fig. 3). Sometimes the growth rates are so great that an ischemic central tumor necrosis may occur.

Among the intriguing aspects of this model system are the variable periods of latency before tumor cells begin to proliferate. This can be from five to 60 days. Assuming a critical number of cells are required to establish a metastasis, and that sites vary in their proclivity towards tumor growth, then clinical phenomena such as waxing and waning tumor growth or late recurrences after cessation of treatment become somewhat understandable. Measurements of growth rates or cell kinetics become more approachable using this model.

Ornithine decarboxylase (ODC) is one of many enzymes associated with cell proliferation. Since the growth of metastases is so variable it was considered of value to investigate the levels of ornithine decarboxylase in heterotransplanted tumors at different stages of their evolution. These studies were correlated with more classical methods of measuring cell proliferation such as $^3$H — thymidine incorporation. It was observed that rapidly proliferating tumors contained high specific ODC activity and conversely slowly dividing cells contain little or undetectable ODC activity. $^3$H — thymidine incorporation rates had a high degree of correlation with ODC activity. The importance of these measurements to chemotherapy became obvious when we studied a primary tumor from an untreated child. This tumor was obtained immediately after removal and several areas identified. A central area of necrosis was surrounded by a hemorrhagic region and then a cellular peripheral region where the most viable looking cells were present (Fig. 4). ODC activity was highest in the peripheral cellular portion and virtually absent in the calcified, necrotic center. It is generally accepted that the effectiveness of chemotherapy is compromised when cells are not proliferating or the tumor growth fraction approaches zero, conditions which are probably representative of the central necrotic and midportion low ODC areas. This does not infer that the cells are not viable, and that such tumor cells may not, at a later time under more propitious circumstances, begin to proliferate. Obviously cells in the less vascularized regions will be exposed to lower concentrations of chemotherapeutic agents and would be less vulnerable if they were in a more metabolically quiescent state. This would tend to select out more chemotherapeutically resistant cells.

**Fig. 3. — Nude mouse bearing a human neuroblastoma. The vascular supply originates from the host.**

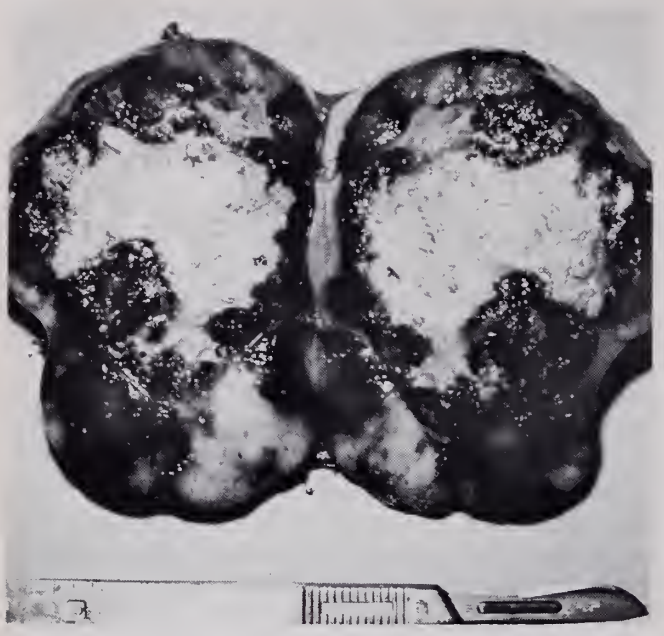

**Fig. 4. — Primary neuroblastoma of the adrenal gland, with three well demarcated areas.**

## Treatment

The treatment of disseminated neuroblastoma has limitations imposed by the feasibility of surgery and radiotherapy. At present, chemotherapy seems to be the most underexploited area. A number of active anticancer drugs have been discovered. Neuroblastoma response rates to drugs in children over two years of age at diagnosis are generally as high as 60%, but the cure rates, i.e. total tumor eradication, apporach 0% with disseminated disease. Eventually, newer approaches are required. Based upon a rather simplistic view of cell proliferation and repair after sublethal exposure to anticancer agents, I established a treatment regimen termed the N-3, or the third neuroblastoma regimen developed at the Memorial Sloan-Kettering Cancer Center.

The first assumption was that if 40 mg/kg body weight of cyclophosphamide and 1.5mg/M$^2$ vincristine could produce moderate tumor clearance in 40-60% of children, then much higher dosages would be more effective. In fact, the average maximally tolerated dose of cyclophosphamide of 160 mg/kg in two days was established after preliminary trials. The severity of the hematologic toxicity did not appear to increase as dosages of cyclophosphamide were escalated beyond 80 mg/kg. It, however, did increase the potential for hemorrhagic cystitis. Vincristine has been given at maximally tolerated dosages in the past and escalating the dosage further would offer little additional cell kill and possibly more toxicity. Based on the assumption that cyclophosphamide and vincristine would produce incomplete kill or injury to a large portion of cells, the next step was to introduce agents that would interfere with repair. Previous studies with a pyrimidine antagonist, 5-trifluoromethyl-2'-deoxyuridine, indicated that it was effective when used as a single agent in 2/6 patients, and would be most advantageously used in combination with other agents. This compound was then to be introduced in a drug sequence. Concomitant with these studies, I extended other workers' observations on the control of cell proliferation by cyclic nucleotides, specifically cyclic adenosine monophosphate (c'AMP). A concentration of one mM dibutyryl cyclic AMP inhibited the proliferation of cultured human neuroblastomas. Since phosphodiesterase controlled the intracellular metabolism of this enzyme, inhibitors of phosphodiesterase should lead to high intracellular c'AMP levels. One potent inhibitor is papaverine, selected because of its availability and its relatively established clinical pharmacology. This drug in concentrations of 0.026 mM raised intracellular c'AMP levels of neuroblastoma cells four-fold, and caused cell lysis, growth inhibition, and morphologic differentiation. It also caused tumor lysis and growth inhibition of transplanted human tumors in nude mice.

Since papaverine was also found to inhibit membrane transport of thymidine, uridine and sugars, and did not appear to affect normal cells, it seemed logical to add papaverine to the drug regimen following administration of other drugs. The sequence of cyclophosphamide — vincristine for two days followed by F3TdR-papaverine for two days was established and found to be curative in nude mice bearing human neuroblastomas. Clinical trials were started in August 1974. A number of unexpected complications were observed over the years and some have been corrected. The hematologic depression during the first eight to ten days following administration of the N-3 is severe and requires blood, platelet and occasionally granulocyte transfusions. This diminished the degree of anemia, thrombocytopenia and lethal sepsis, but a number of cases of lethal graft versus host disease were noted. This complication can be effectively eliminated by pre-administration irradiation (1800R) of all blood cell products. An additional problem which developed was an increased incidence of hemorrhagic cystitis. This may be due to the higher dosages of cyclophosphamide, but also because some of the previously treated children had prior radiation of the bladder as well as/or cyclophosphamide administered with inadequate hydration. The importance of the latter was emphasized in a study of modification of fluid and electrolyte administration with the higher dosages of cyclophosphamide. To counteract the antidiuretic effect of cyclophosphamide, furosemide (Lasix) was given in a continuous infusion over 24 hours

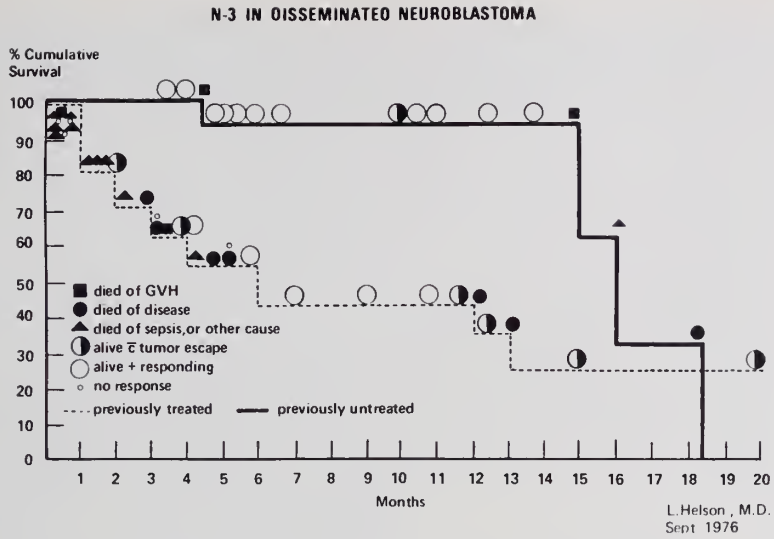


**Fig. 5. — Actuarial survival curves of 45 patients with disseminated neuroblastoma.**

with an intravenous fluid volume of at least 3,000 ml/m²/day. An additional method used in high risk patients was to instill into the bladder for five minutes a 0.8% solution of acetylcysteine in saline every half hour just prior to and following cyclophosphamide infusion. This serves to keep the bladder free of urine containing cyclophosphamide metabolites and decrease exposure of the sensitive lining. It does not eliminate high blood levels which may contribute in part to some transmural damage.

The responses of the patients have been quite dramatic. Of 45 patients with disseminated neuroblastoma, 16 had minimal to no previous therapy. Many responded with "complete" clinical clearance of disease (Fig. 5). After three to five courses were given, the dosages were reduced by one half, i.e. two-day courses were given at monthly intervals, and the children continued on therapy. In this group there were four relapses at 17, 14, 11 and nine months. Three of these responded to resumption of treatment with the higher dosages. A persistent thrombocytopenia developed in one child which precluded administering any additional chemotherapy. Two children died of GVH disease and sepsis. Both lacked evidence of disease on autopsy. In one patient, multiple foci of ganglioneuroma was found in previously metastasized sites in her bones. Of 29 previously treated patients, 24 responded after one course with an overall response rate of 83%. These responses were not sustained nor complete, however, all eventually died of disease, of sepsis, of GVH, and two of cardiac failure and hemorrhage (Fig. 5). To avoid the latter we maintained a hemoglobin of 10 grams percent during the period of drug administration to avoid congestive failure.

Unfortunately, total tumor clearance in these previously treated patients has not been achieved with this drug regimen and although clinical problems such as hematuria and graft versus host disease have been resolved, others remain. The central problem of cell resistance to extremely large doses of cyclophosphamide, the duration of drug therapy, and the intensity of therapy require further exploration.

An updated review (May 1978) of this series of patients revealed that all previously treated Stage IV patients finally succumbed to disease with a median survival time of six months and a range of 24 months. Previously untreated patients had a median survival of 18 months with a range of six to 36+ months. Eighty five percent of patients relapsed; 3/6 survivors have relapses within the central nervous system, i.e., one case of neuroblastoma meningitis, epidural cord compression, and an epidural mass compressing the torcula region of the skull. Because of these data, a modification of the protocol has been derived and is termed the N-3 S.E. for sequential escalation. Basically, the same drugs are used except that Ara C and hydroxyurea are added and escalating doses are used rather than high induction and then low maintenance. The rationale for this was based upon the observation that resistance develops in patients given the same dosages and that escalating the dosages in a serial fashion improved tumor cell kill of emerging resistant cells.

Eventually, an optimal treatment for disseminated neuroblastoma will be developed and it is my opinion that the development of the "N-3 S.E." protocol is a stepping stone towards this goal.

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# Traumatic Perforation of the Esophagus in a Newborn

Keith S. Kanarek, M.D. and Ronald F. David, M.D.

**Abstract: Traumatic perforation of the esophagus in a low birth weight infant is described. The diagnosis was made by observation of the abnormal path of the nasogastric tube which was passed to deflate the stomach. The infant survived with nonsurgical management.**

Endotracheal intubation of a newborn infant has been associated with perforation of the trachea, infection and tracheal stenosis.[1,2] Perforation of the esophagus is a rare complication. This report presents a case associated with right tension pneumothorax.

## Report of Case

The patient, first of a twin delivery by cesarean section, was transferred to the Regional Neonatal Intensive Care Unit because of prematurity. The infant's birth weight was 936 grams and estimated gestational age 28 weeks.

On admission the baby was in mild respiratory distress requiring 25% oxygen. Within a day of admission apnea developed for which nasal CPAP and later aminophylline was administered. Because of increasing severity and frequency of apneic attacks it was decided to intubate and place the infant on a respirator. Two attempts at intubation failed with the tube slipping down into the esophagus on each occasion. A third attempt was successful and the infant was placed on a positive pressure respirator. A pneumothorax was suspected by shifting of the apical cardiac impulse and decreased air entry on the right side. While waiting for an x-ray to confirm the pneumothorax and position of the endotracheal tube, a nasogastric feeding tube was easily passed to deflate the abdomen which had become distended following intubation and bagging.

The x-ray (Fig. 1) showed the nasogastric tube to be in the right pleural cavity. Its abnormal path made us suspect traumatic perforation of the esophagus. The tube was withdrawn and a second attempt followed the previous route which was confirmed on x-ray. This confirmed our suspicion of a perforated esophagus. The pneumothorax was managed with an intercostal drain and underwater seal.

A cardiac catheter guide wire with a J-loop, the point opposite to where the site of perforation was suspected, was then passed into the stomach and the nasogastric tube fed over this. Continuous suction, intravenous fluids and later hyperalimentation utilizing dextrose water, amino acids and a fat emulsion was instituted.

The infant improved and gained weight. A gastrostomy was introduced when the nasogastric tube slipped out inadvertently and there was concern over reintroducing it and possibly reopening the perforation. After 22 days of hyperalimentation, formula feeds were begun through the gastrostomy. Methylene blue was administered orally to the infant and all recovered from the gastrostomy. The chest tube was, therefore, removed as it was felt that the perforation had sealed. Throughout this period the patient was maintained on a mechanical ventilator, since all attempts at weaning proved unsuccessful.

At seven weeks of age, when the infant weighed 1603 grams, he was transferred to Shands Teaching Hospital at the University of Florida for ligation of the ductus arteriosus as it was believed that this contributed to the respiratory difficulty and inability to be weaned from the ventilator. This approach proved successful and within a few days he was weaned to CPAP nasally. The baby was subsequently transferred back to the Orlando Neonatal Intensive Care Unit where he was weaned off CPAP. Oral feedings were begun which the infant tolerated well. The gastrostomy was closed, and he was discharged from the intensive care unit weighing 2098 grams.

The infant has been seen at six months of age. He is gaining weight, has no feeding problems and is developing normally.

## Discussion

Perforation of the esophagus in the newborn is a rare occurrence that is often traumatic and usually iatrogenic in nature. In a review of 16 cases by Lee and Kuhn[1] eight followed aspiration of oral secretions, two were associated with difficulty in passing a nasogastric tube, one was caused by the obstetrician's finger in the infant's mouth during breech extraction and in two the etiology was unknown. Only one report noted an association with attempted endotracheal intubation. However, four subsequent cases have been described following traumatic endotracheal intubation.[2,3] Of these 20 cases seven occurred in low birth weight infants probably reflecting the increased attention demanded by these patients and their increased risk of complications.

Hyperextension of the neck during instrumentation increases the possibility of perforation by stretching the pharyngeal tissues.[2,4] The type of tube, use of metal stylet and experience of the person intubating the infant are important contributing factors. Both in the cases described by Touloukian et al[2] and in the present case a Portex tube with a metal stylet were used, a combination which may easily produce a tear of the pharyngeal wall if excessive or repetitive force is employed.

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**Fig. 1. — Nasogastric tube in right pleural cavity.**

The infant usually presents with respiratory or feeding difficulties and the diagnosis is often unsuspected.[5,6] In the majority the esophagus ruptures into the right pleural cavity[5] so that a right sided pneumothorax, especially following a difficult intubation or passage of a nasogastric tube, should lead one to suspect the condition. Further suspicion should be aroused by the presence of subcutaneous emphysema in the neck.[7,2]

One should examine the pleural drainage for fluid resembling saliva.[6] Radio-opaque studies are usually confirmatory and will demonstrate the site of rupture.[5,6]

The diagnosis was established in our patient by detecting the nasogastric tube in the right pleural cavity. It is speculative that had the tube passed successfully into the stomach the diagnosis may not have been made as the pneumothorax would have been aspirated, continuous nasogastric suction instituted to prevent distention of the stomach while the infant was on the ventilator and feeds withheld until the baby's condition improved.

The recommended treatment of esophageal rupture is surgical closure through a thoracotomy or laparotomy.[5] This approach is probably correct when the rupture occurs at the lower end of the esophagus where healing will be impaired by regurgitation of gastric juices. When the hypopharynx is involved, however, spontaneous healing may occur as reported in our patient and by Talbert et al.[3] In such cases, the hazards of taking a small infant to surgery as in our 936 gram patient requiring ventilatory support with a right sided pneumothorax and an underwater drain must be weighed against the possibility of successful nonsurgical management.

## Acknowledgment

The authors wish to acknowledge the advice and encouragement of Dr. Talbert in the management of this patient and in reviewing the manuscript.

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SPECIAL ARTICLES

# Immunization of Rural Children in North Central Florida

Martin L. Schulkind, M.D

**Abstract: Four hundred children and youth living in rural north central Florida were surveyed to determine their immunization status. The survey was conducted at the time the children appeared for health care at one of the rural health clinics established by the University of Florida in communities chronically lacking physician services. The majority of these patients had received their immunization through county health departments.**

**Seventy-eight percent of the children 1-4 years of age and 94% of those 5-21 years of age had received three or more DPT immunizations. Sixty-four percent of 1-4 year olds and 89% of 5-21 year olds had received three or more doses of polio vaccine. Seventy-five percent of 1-4 year old and 85% of 5-21 year old children were immunized against measles and rubella. These results indicate that the children surveyed were as well, if not better, immunized as the children recently surveyed in the 1976 U.S. Immunization Survey.**

Recently there have been several reports in the press as well as recent studies which have indicated a decrease in the status of immunizations among children in the United States. [1, 2] The preliminary report of the U.S. Immunization Survey, 1976, shows a decrease in the percent of the population 1-4 years of age who have been immunized with three or more doses of polio vaccine from a level of 78.6 in 1964 to 64.8 in 1975.[3] Similarly, the percent of population aged 1-4 immunized with three or more doses of diphtheria, pertussis and tetanus (DPT) immunogens decreased from 75.6 in 1973 to 71.4 in 1976. The percent of children aged 1-4 who have received the measles vaccine has been increasing over the years from 24.0 in 1964 to 65.9 in 1976.

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In order to study the status of immunizations of children in north central Florida a survey was taken of those children who attended three rural health clinics. These clinics are located in Mayo (Lafayette County), Cross City (Dixie County), and Trenton (Gilchrist County) and have been organized and staffed by the Department of Community Health and Family Medicine of the University of Florida College of Medicine.

## Methods

The survey was conducted on 400 children between ages 1 and 21 years who attended these clinics over a three-month period. Parents were asked to provide the necessary biographical information and to bring records of immunization if they had them. In those situations where records of immunization were not available the appropriate physician or county health officer was contacted and the information obtained.

## Clinic Facilities

The three rural health clinics were established in those communities which were at least 25 miles distance from other health care providers and in which no physician resided. The clinics were developed in cooperation with the citizens of these communities who, in all situations, formed a Health Trust organizational structure to help manage these clinics and provide local community input. One of these clinics (Mayo) has been described in previous articles and is similar in its structure to the other two. [4, 6] In general, most of the patients who attended these clinics are medically indigent and live in small rural communities.

## Results

The survey of the sexual distribution of the children studied showed that in Mayo 87 of 185 children (47%)

were male and 98 (53%) were female. In Trenton 68 of 140 children (49%) were male and 72 (51%) were female. The total of all three clinics showed 194 of the 400 children were male (48%) and 206 (52%) were female. There was little difference noted in the sexual distribution in any of the three clinics. The number of blacks accounted for 17% while 83% of the patients studied were white.

The majority of the population received immunizations in county health departments, whereas only 2% received immunizations at military installations and 12% received immunizations from private physicians. (Table 1). Interestingly, only 11% of the patients had immunization records available, the other 89% did not. Of the 11% with records, the majority had received their immunizations at military installations or in private physicians' offices. In general, most of the parents of patients who received immunizations at county health departments appeared less knowledgeable about the immunization of their children than did the parents of children immunized in the military or private physicians' offices.

Table 2 shows the distribution of actual immunizations received by children in the three rural clinics. When we looked at the immunization status of children aged 1-4 years in these clinics we noted that 5% of this group in Mayo, 13% in Cross City and 3% in Trenton had received no immunizations. These differences are not statistically significant. Seventy-six percent of the children aged 1-4 years in Mayo, 78% in the same age group in Cross City, and 82% of this age group in Trenton had received three or more immunizations against DPT.

The status of polio immunizations for this age group was examined and generally the children appeared less well immunized against polio than they did against DPT. in Mayo only 54% of the children aged 1-4 years had received three or more immunizations against polio, while in Cross City 74% and in Trenton 75% had received the same immunizations.

Table 2 also shows the status of measles immunization in age group 1-4 years: 75% had been immunized in Mayo, 65% in Cross City and 71% in Trenton. Similar figures were noted for immunizations against rubella.

When the immunization status of the 5-21 year age group was studied, several children were noted to be less than adequately immunized. For example, in Mayo one of these older children had received no immunizations, another four children (3%) had received only one immunization against DPT, and seven (or 6%) had received only two immunizations, whereas 90% of the children in the 5-21 year age group in Mayo had received three or more immunizations against DPT. Similar experiences were noted in Cross City where 93% of the children 5-21 years old had received three or more immunizations against DPT and in Trenton where 100% of the children in this age group had been immunized with three or more immunizations against DPT.

Also shown in Table 2 is the status of polio immunizations for the 5-21 year age group. In all three

**Table 1. — Survey of Immunization Status of Children in Three Clinics in Rural Florida.**

| Rural Clinic | Number Patients | Race | | Site of Immunization | | | Immunization Record | |
|---|---|---|---|---|---|---|---|---|
| | | Black | White | CHD. | Milit. | LMD. | Yes | No |
| | N(%) | N(%) | (N%) | N(%) | N(%) | N(%) | N(%) | N(%) |
| **Mayo** | | | | | | | | |
| 1-4 | 58 | 11(19) | 47(81) | 52(90) | 0 | 3 (5) | 3 (5) | 55(95) |
| 5-21 | 127 | 30(24) | 97(76) | 115(91) | 0 | 11 (8) | 4 (3) | 123(97) |
| Total | 185 | 41(22) | 144(78) | 167(90) | 0 | 14 (8) | 7 (4) | 178(96) |
| **Cross City** | | | | | | | | |
| 1-4 | 23 | 3(13) | 20(87) | 17(74) | 0 | 3(13) | 3(13) | 20(87) |
| 5-21 | 52 | 8(15) | 44(85) | 45(87) | 2(4) | 4 (8) | 5(10) | 47(90) |
| Total | 75 | 11(15) | 64(85) | 62(83) | 2(3) | 7 (9) | 8(11) | 67(89) |
| **Trenton** | | | | | | | | |
| 1-4 | 34 | 3 (9) | 31(91) | 27(79) | 0 | 6(18) | 2 (6) | 32(94) |
| 5-21 | 106 | 11(10) | 95(90) | 72(68) | 8(8) | 26(25) | 25(24) | 81(76) |
| Total | 140 | 14(10) | 126(90) | 99(71) | 8(6) | 32(23) | 27(19) | 113(81) |
| **Grand Total** | 400 | 66(17) | 334(83) | 328(82) | 10(2) | 53(12) | 42(11) | 358(89) |

Table 2. — Survey of the Status of Immunization Against DPT, Polio, Measles, and Rubella in Children Attending Three Clinics in Rural Florida.

| | | DPT | | | | | | Polio | | | | | | Measles | | Rubella | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rural Clinic | Number Patients | 0 N(%) | 1 N(%) | 2 N(%) | 3 N(%) | 4 N(%) | 5 N(%) | 0 N(%) | 1 N(%) | 2 N(%) | 3 N(%) | 4 N(%) | 5 N(%) | Yes N(%) | No N(%) | Yes N(%) | No N(%) |
| **Mayo** | | | | | | | | | | | | | | | | | |
| 1-4 | 58 | 3 (5) | 5(11) | 5 (9) | 15(26) | 28(48) | 1 (2) | 3 (5) | 11(19) | 13(22) | 22(38) | 9(16) | 0 | 44(76) | 14(24) | 44(76) | 14(76) |
| 5-21 | 127 | 1 (1) | 4 (3) | 7 (6) | 12 (9) | 37(29) | 66(52) | 1 (1) | 8 (6) | 10 (8) | 33(26) | 42(41) | 23(18) | 109(86) | 18(14) | 105(83) | 22(17) |
| Total | 185 | 4 (2) | 10 (5) | 12 (6) | 27(15) | 65(35) | 67(36) | 4 (1) | 19(10) | 23(12) | 55(30) | 61(33) | 23(12) | 153(83) | 32(17) | 149(81) | 36(19) |
| **Cross City** | | | | | | | | | | | | | | | | | |
| 1-4 | 23 | 3(13) | 0 | 2 (9) | 10(43) | 8(35) | 0 | 3(13) | 0 | 3(13) | 9(39) | 8(35) | 0 | 15(65) | 8(35) | 15(65) | 8(35) |
| 5-21 | 52 | 1 (2) | 1 (2) | 2 (4) | 3 (6) | 19(37) | 26(50) | 2 (4) | 2 (4) | 5(10) | 12(23) | 20(88) | 11(22) | 44(85) | 8(15) | 45(87) | 7(13) |
| Total | 75 | 4 (5) | 1 (1) | 4 (5) | 13(17) | 27(36) | 26(35) | 5 (7) | 2 (3) | 10(13) | 21(28) | 28(37) | 11(15) | 59(79) | 16(21) | 60(80) | 15(20) |
| **Trenton** | | | | | | | | | | | | | | | | | |
| 1-4 | 34 | 1 (3) | 1 (3) | 4(12) | 10(29) | 18(53) | 0 | 1 (3) | 2 (6) | 6(18) | 17(50) | 8(24) | 0 | 24(71) | 10(29) | 24(71) | 10(29) |
| 5-21 | 106 | 0 | 0 | 0 | 9 (8) | 36(34) | 61(58) | 0 | 2 (2) | 1 (1) | 25(24) | 46(43) | 32(30) | 88(83) | 18(17) | 91(86) | 15(14) |
| Total | 140 | 1 | 1 (1) | 4 (3) | 19(14) | 54(39) | 61(44) | 1 (1) | 4 (3) | 7 (5) | 42(30) | 54(39) | 32(23) | 112(80) | 28(20) | 115(82) | 25(18) |
| **Grand Total** | 400 | 9 (2) | 12 (3) | 20 (5) | 59(15) | 146(37) | 154(38) | 10 (3) | 25 (6) | 40(10) | 118(30) | 143(36) | 66(17) | 324(81) | 76(19) | 324(81) | 76(19) |

clinics a few patients were found to be inadequately immunized, however, in Mayo 88% of the children over five years had received three or more doses of polio vaccine, as had 83% in Cross City and 95% in Trenton. The immunization status against measles for this population group 5-21 years of age was studied: 86% of the children in Mayo, 85% in Cross City and 83% in Trenton had been immunized. Similar proportions of children over five years had been immunized against rubella in each of the three clinics.

Table 3 summarizes the data for all three clinics according to the two age categories of 1-4 and 5-21 years. There was a total of 115 children aged 1-4 years of age, and 285 aged 5-21 studied. The sexual distribution for these two age groups was very similar with 45% of the population aged 1-4 being male and 49% of the population 5-21 being male. Similar distributions for race for both age groups were noted: 15% of those aged 1-4 were black, and 17% of those aged 5-21 were black. A comparison of the settings in which children were immunized was also made. As noted in Table 3a none of the children aged 1-4 was immunized at military establishments, while 83% had been immunized in county health departments and 10% by local physicians. Similarly, for ages 5-21 years 4% had been immunized at military installations, while 81% had been immunized in county health departments and 14% by private physicians. Twenty-seven percent of children aged 1-4 and 12% over five years of age had records of immunization available.

Table 3b summarizes the data of specific immunizations given to children in the three clinics arranged according to the two age group categories. The data shows that 78% of the population aged 1-4 had received three or more DPT immunizations while 94% of those aged 5-21 had received three or more DPT immunizations. Similarly, 64% of those aged 1-4 and 89% of the population aged 5-21 had received three or more polio immunizations. It is interesting to note that at the present time the county health departments in the state of Florida have chosen to provide only four doses of polio vaccine in their immunization program whereas most private physicians, as well as those in the military, generally give five doses of oral polio vaccine.

Table 3b also summarizes the data for measles immunization showing 75% of children aged 1-4 and 85% of children aged 5-21 had been immunized. Similar numbers were found for immunizations against rubella.

## Discussion

The results of these studies would indicate that the children who attended the three rural Florida clinics were as well, if not better, immunized than the children in the United States as a whole: whereas only 71.4% of the children in the U.S. aged 1-4 years had received three or more doses of DPT, 78% of the children of the same age in our study had received three or more doses of DPT.[3] Similarly, while 61.6% of children ages 1-4 in the U.S. survey had received 3 or more doses of polio vaccine,

**Table 3a, b. — Summary of the Survey Findings About The Immunization Status of Children Attending Three Clinics in Rural Florida.**

| Age Group | Number | Race | | Site of Immunization | | | Immunization Record | |
|---|---|---|---|---|---|---|---|---|
| | | Black N(%) | White N(%) | CHD N(%) | Milit. N(%) | LMD N(%) | Yes N(%) | No N(%) |
| 1-4 | 115 | 17(15) | 98(85) | 96(83) | 0 | 12(10) | 8 (7) | 107(93) |
| 5-21 | 285 | 49(17) | 236(83) | 232(81) | 10(4) | 39(14) | 34(12) | 251(88) |

| Age Group | Number | DPT 0 | DPT 1 | DPT 2 | DPT 3 | DPT 4 | DPT 5 | Polio 0 | Polio 1 | Polio 2 | Polio 3 | Polio 4 | Polio 5 | Measles Yes | Measles No | Rubella Yes | Rubella No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-4 | 115 | 7(6) | 7(6) | 11(10) | 35(30) | 54(47) | 1 (1) | 7(6) | 13(11) | 22(19) | 48(42) | 25(22) | 0 | 83(72) | 32(28) | 83(72) | 32(28) |
| 5-21 | 285 | 2(1) | 5(2) | 9 (3) | 24 (8) | 92(32) | 153(54) | 3(1) | 12 (4) | 16 (6) | 70(25) | 118(41) | 66(23) | 241(85) | 44(15) | 241(85) | 44(15) |

64% of this age group in the rural Florida survey had received the same number of doses. Of the 1-4 year old children in the U.S. surveyed 51.9% had received one dose of measles vaccine; 74% of the rural Florida children had received these immunizations. The percentages of 1-4 year old children in the U.S. who had received one dose of rubella vaccine were compared with the similarly-aged group of Florida children: 51.7% of U.S. children had received one dose of rubella vaccine, compared to 75% of the children in rural Florida surveyed. While there appears to be differences in these comparative data, no statistically significant differences were noted between the proportion of children immunized in rural Florida when compared to the children surveyed in the U.S. survey.

In recent years the state of Florida has surveyed the immunization status of 2-year-old children in several of its more populous counties.[7] These studies showed that 76.8% of this age group had received three or more doses of DPT, 78% had received two or more doses of polio vaccine, while 66.7% had received measles immunization, and 65.2% had received rubella immunizations. These percentages are very similar to the percentages we noted among Florida children aged 1-4 years.

Although the data in this report refer only to patients who attended the clinics, they are probably representative of the rural communities in which the clinics are located. An analysis of patient data from the clinic in Mayo showed that 95% of the residents of Lafayette County use the clinic.[6] Otherwise, one might be concerned that individuals who come to the clinics would be expected to have a better immunization history than those who do not come to the clinics.

In general, the data in the present survey, as well as those in the U.S. and Florida surveys, all indicate the need for a more vigorous effort to immunize children in rural settings as well as in urban settings if we are to reach the desired immunization level of 95%. One striking fact noted by this study is the lack of knowledge which most parents have about immunizations. To a degree this was reflected by the failure of most parents to have immunization records of their children available when surveyed. Usually when asked about their children's immunization status parents would respond by saying that they were "up to date." When additional information about immunizations or records was obtained from their private physician or county health department, quite often the children's immunizations were not "up to date." Perhaps better patient and family education about immunizations provided by physicians, schools and governmental health agencies is necessary if we are to reach our stated goal of immunized population.

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# The Weasel and the Cat Scan

## A Fable for Physicians

**Richard J. Feinstein, M.D.**

*Editor's Note: Recent history is replete with government regulations attempting to replace the commonsense of good medical practice with a substitute. Too often the result is lowered health status of the people. Dr. Feinstein's fable places the matter into clearer focus. — E. Charlton Prather, M.D., Associate Editor.*

**Abstract: A fable is recounted here about a community of animals that once lived in a forest clearing. The story reveals the importance of the physician to the wellbeing of the community, and shows the consequence of government regulation on health care. It is hoped that this story will serve as an allegory for our real and present dilemma.**

Once upon a time a group of animals lived in a small village deep in a dark and lovely forest. They had all come from other villages because chaos and bankruptcy had made their lives unpleasant. At the new village they found a lovely stream, plenty of food, and the companionship of other hard-working creatures. They organized a government and chose leaders, like Bear and Wolf, to help run the affairs of the village. Each animal was asked to choose a job to perform within the community. Each chose a different job pleasant for him to do yet necessary for the good of the villagers.

Fox became the healer. He loved to observe an animal who was ill and then make him well. He learned which roots could be boiled to soothe the severe pain in the young raccoon's stomach and which flower water would help Mrs. Skunk when her baby was due. His greatest pleasure was in helping a sick creature to become well.

At first no money was used; Fox received goods or services from the animals he treated in return for his care. As the village grew, however, the leaders decided that a money system was needed and trout bones were chosen as currency. All the trout bones in the village were collected and divided equally among the creatures. The village policemen, Cougar and Bobcat, were assigned to watch the stream to prevent more trout bones from being brought in.

The village prospered and Fox was busy and happy. Each time he treated a sick animal he received a single trout bone and soon he had accumulated many trout bones, so many in fact that he had become one of the wealthiest animals in the village. He moved to a large house near the stream and his children were taught by the best teacher.

Eagle and Weasel were young, bright animals ready to begin careers within the community. Eagle wanted to become a healer. He admired Fox and wished to be like him. In day dreams he performed difficult surgical operations which allowed crippled animals to walk or the blind to regain their sight. He visited the village leaders to ask them if he could become a healer. Since the village was growing and would benefit from having another physician, they gave Eagle their blessing and sent him off to see Fox. Fox was ecstatic about having a young student with whom he could share his knowledge of healing.

Weasel also admired Fox, and he too wished to become a healer. He admired Fox, however, for his house and for the number of trout bones that it was rumored that Fox earned each year. He coveted the exalted position Fox had attained within the village and envied the respect he received. Weasel visited the leaders to ask if he too could become a healer. He told Bear and Wolf of his great love for all animals and of his desire to make sick creatures well again. Bear and Wolf decided that the community would benefit from still another young doctor and sent Weasel to see Fox with their blessing. Fox was delighted with the prospects of another student and asked Weasel to join him and Eagle on their rounds.

For many years Eagle and Weasel stayed with Fox and worked very hard to learn all he knew about disease and healing. Finally Fox brought Eagle and Weasel before the village leaders to announce that the young healers were ready to practice their art. Bear and Wolf

were delighted because the village needed their services. Bear issued an official decree affecting the doctors and villagers. Even though all animals had been given an equal number of trout bones when the village first began, there were now many animals who possessed too few to purchase food or medical care. The leaders, Bear explained had decided that the government would bring new trout bones from the stream to be used for food and health care for the poor animals.

There was very little discussion after Bear made his statement. Fox had always treated all sick animals without regard to their ability to pay, but he had told Bear he would start asking the government for a trout bone every time he treated one of the designated poor animals. Consequently, he became richer because he received compensation for treating animals whom he had previously treated without charge.

Snake, the village treasurer, became alarmed at the number of trout bones Cougar and Bobcat brought in; however, the leaders were not upset. There were plenty in the stream. Everyone was happy, and most of the animals continued to work hard and pay for food and medical care.

Eagle loved being a physician and saw many patients at his clinic. He took a wife and had several children, and earned more trout bones than he had ever imagined possible.

Weasel worked very hard as a physician because he knew he would receive a trout bone for each sick animal he treated. He, therefore, treated many of them; perhaps too many to provide good care. He learned if he visited the sick old deer often during the week, he could earn many trout bones instead of just one. If he incised the small abcess on squirrel's leg he could ask for two trout bones, but if he applied a hot poultice he could only ask for one. The best thing that Weasel learned, however, was to have many poor animals for patients. Since they did not pay for their treatments, he discovered that they really did not care how many trout bones were paid for them by the government. This led Weasel ultimately to ask for two trout bones for each treatment instead of the usual one.

Eagle and Fox heard of Weasel's greed. They agreed that he was wrong and would ultimately make things more difficult for them but what could they do. They remained indecisive and, despite much discussion, could not bring themselves to act against one of their peers.

Weasel was still not content with the number of trout bones he earned. He decided to purchase a magic black box from a healer in a distant village. The healer, a Cat, promised that the magic box could make wondrous diagnoses and would make Weasel the most famous doctor in his village. Weasel announced that he had acquired a magic black box and could use it to cure ills that Fox and Eagle could not even begin to diagnose. He charged three trout bones for use of the machine and sick animals flocked to his clinic.

Even Fox and Eagle, who detested Weasel, referred certain sick patients to the magic box when they could not make the patient well using their more traditional methods.

Weasel became the richest animal in the village and was frequently arrogant about the fact. Most of the villagers began to despise Weasel for his greed and the way he abused his position as healer. Many began to despise Fox and Eagle also, accusing them of complicity in the health care problems of the village. Fox and Eagle were distraught but felt helpless about doing anything to make the situation better.

Bear and Wolf called a town meeting to announce that a monetary crisis had arisen. The treasury was empty and Cougar and Bobcat could find no more trout bones in the stream. More and more citizens were asking to be declared poor so they would be eligible for free food and medical care. The number of hard-working, self-sufficient citizens had declined to less than half the population. "There is only one solution," shouted Wolf, "we must change the entire system of health care within the village." He and Bear proposed that the doctors work for the government and receive a fixed annual salary. All decisions about health care would be made by Possum, who had been appointed Minister of Health. Taking care of sick poor people, Bear proclaimed, had become too expensive.

Fox and Eagle met once again to discuss the terrible circumstances gripping their village and themselves. They reminisced about the good old days when Fox was loved and respected and Eagle was a dedicated young student. Was it Weasel's greed that caused the trouble, Eagle mused, or Bear's decision to have the government pay for the poor? Why have so many hard-working citizens become part of the welfare dole? Fox wondered. "We must meet with the leaders to try and salvage the village from total chaos and bankruptcy," he continued. "We can never return to things the way they once were but if we fail completely here then there is nowhere else to run. We all came from other villages because they had become bankrupt and unhappy. We must work out our problems."

How can we solve the health care dilemma in the United States?

• Dr. Feinstein, 3661 South Miami Avenue, Miami 33133.

# Maternal and Child Health Programs Continuation of Emphasis or Diffusion of Purpose

Jorge Deju, M.D., M.P.H.

In order to reduce the threat of diarrhea among infants of the underprivileged, New York City opened the first Milk Station in 1893. This marked the beginning of a trend to provide services to special high risk populations, namely mothers and children.

The creation of the Federal Children's Bureau in 1912 was another step taken to emphasize the need for services to mothers and children. The Sheppard-Towner Act, in effect from 1922 through 1929, included broad national considerations for such services. Title V of the Social Security Act (1935) made possible the further implementation of direct services to mothers and children. Enactment of the Maternal and Child Health and Mental Retardation Planning Amendments to the Social Security Act (1963) increased the service emphasis and made possible the development of projects for services to pregnant women and their infants. Congressional approval for services to children through Children and Youth Projects was realized in 1965.

The latest effort emphasizing services to mothers and children appears in HB 10704 submitted by Congressman Paul Rogers of Florida to the second session of the 95th Congress. This proposed legislation would extend and improve the Maternal and Child Health and Crippled Children Programs provided by Title V of the Social Security Act.

It is noticeable, however, that while the Congress continues to emphasize services to mothers and children, there has been a tendency since the late 1960's to reduce the visibility of such services through administrative actions and interpretations of Congressional intent quite different from what the Congress had in mind. Despite the fact that the Congress wanted to increase the visibility of the Maternal and Child Health and the Crippled Children Programs, the bureaucracy in Washington (DHEW) and at the Atlanta Regional Office felt otherwise. The stated Congressional intent two years ago was to reestablish and fill 70 full-time federal maternal and child health positions in order to strengthen such programs. This intent has practically been ignored. Though the money was specifically earmarked to meet budgetary requirements, most of those positions were never filled; those that were had the scope of their functions significantly diminished and in a number of cases the classifications were revised downward in order not to attract career-oriented individuals.

The latest strategic bureaucratic effort to ignore Congressional mandates is conversion of a number of Children and Youth, and Maternity and Infant Care Projects to "family oriented primary care projects." This is to be accomplished by merging them with or into Community Health Centers. To effect this conversion small amounts of funds (an average of $100,000 per project for 25 projects for the first year) will be made available for planning purposes. In exchange, services provided to mothers and children will be expanded to the whole population and the range of services will be expanded to include emergency medical services.

Considering the past history of Community Health Centers and the programmatic emphasis on the provision of primary health care services, it is easy to assume that the preventive health care services provided to high-risk mothers and children will be reduced to provide acute medical care to the population served. This action would significantly deemphasize the trend that began over 80 years ago. This merger is apparently being done in order to accommodate the desires of a small group of administrators at the national and regional levels who appear to be striving to create a National Health Service structure rather than a National Health Insurance plan or program as envisioned by the most liberal of Congressmen.

Administrators ignoring Congressional intent ignore as well the basic democratic principles of our form of government. Those of us dedicated to serve mothers and children are aware of the advances achieved in this field. We must stand with our Congressional friends and

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challenge the attack upon services to mothers and children and the blatant disregard of Congressional intent. In essence, those interested in preventive health care services for mothers and children should take a firmer stand; otherwise, a small number of administrators will continue to disregard Congressional mandates and attempt to develop their own system. They have made their initial moves; Migrant Health first, now Maternal and Child Health.

It is now up to the Congress and to those interested in truly expanded serves to mothers and children to see to it that MCH programs receive the emphasis that has been mandated since the turn of the century. We should continue to move forward, but forward in accordance with Congressional intent and the will of the people which the Congress represents.

● Dr. Deju, 1323 Winewood Boulevard, Tallahassee 32301.

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**Mr. Jerrold A. Van Dyke of Gainesville (right), Assistant Editor of *The Journal* and two other Floridians attended a medical journalism workship sponsored by Sandoz Pharmaceuticals in Chicago on January 20. Mr. Van Dyke will receive his M.D. degree this spring from the University of Florida College of Medicine. Others in picture (left to right): Mrs. Elsie Trask of Lakeland, Executive Secretary of the Polk County Medical Association; Prof. Blake Kellogg, Professor of Journalism at the University of Wisconsin and a member of the workshop faculty; and Mrs. Pat Powers of Tallahassee, Managing Editor of *The Florida Pharmacy Journal*.**

# Why Social Security Costs Are Soaring

All of us are concerned about the ever increasing costs of Social Security. One of the reasons for some of the increase lies in the fact that last year in the State of Florida the Social Security Disability Program spent $3,784,000 to purchase medical evidence. This figure could be reduced considerably by the physicians of Florida.

Virtually every practicing physician in Florida has received requests from our agency to furnish available evidence for patients of theirs who have applied for Social Security disability benefits. Many physicians have responded promptly and the claim has been handled with a minimum of cost.

Often, however, probably due to lack of understanding as regards the legal requirements for objective evidence, the attending physician provides only a simple statement such as "I have examined John Doe and find him totally and completely disabled." Such statements, as well meaning as they may be, are of no value insofar as our required process is concerned. It is hoped that a better understanding regarding these legal requirements for such objective evidence will bring the needed information from attending physicians. The Social Security Act requires that decisions about disability be based upon adequately described signs, symptoms and laboratory findings. On many occasions original information is inadequate and follow-up letters are required — thus consuming more of the physician's time and delaying closure of his patient's claim. In some instances, the physician's records will not contain adequate information to fully develop the claim, however, it may contain many findings, laboratory tests or examinations which may lessen the cost to the taxpayers. Your cooperation in submitting all available information will be most appreciated. Timely responses aid us greatly in processing the claims expeditiously.

We certainly are grateful for the excellent response we usually get to our requests. If there is something that annoys you about our program, or you would like to learn more about it, please let us know. We recognize that you are busy and efforts to simplify your job as well as ours will benefit us all. There are five area offices; call us if we can be helpful:

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Tallahassee: 1309 Winewood Boulevard
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## Editorial Comment ..... James F. Richards Jr., M.D.

I think the information Dr. Davis wishes to convey is fairly and concisely stated in his brief article. It is my experience in my office that when a patient of mine applies for Social Security Disability benefits, my office is requested to furnish material. Occasionally, this is accompanied by a statement that we should charge $10 for our efforts, but usually not. The vast majority of the time we simply Xerox our office notes, which include all the objective findings present in the case, and to which Dr. Davis alludes, and we send that Xerox copy at no charge.

For about 16 years I have served as a Medical Advisor to the Bureau of Hearings and Appeals. In the document listing those names, I find there are 29 such physicians in the State of Florida, 12 of whom are in the Miami area. In that capacity, I am asked perhaps once or twice a year to review records on patients whose physicians have not substantiated a patient's disability and on the basis of those records I must conclude under oath whether the patient does or does not in my opinion have disability as defined in the Medical Evaluation Criteria under the Social Security Disability Program. These criteria are outlined in the Appendix to Social Security Regulations No. 4, Subpart P and was last published, I believe, in July 1970. Copies are available from U.S. Department of HEW, Social Security Administration.

It might be worthwhile for physicians and patients as well to understand that it is not sufficient for the doctor simply to say the patient is disabled. He must show that there are present, in a specific patient, criteria as outlined in this document.

*(Editor's Note) "Disability" under Social Security means inability to work because of a physical or mental impairment that has lasted — or is expected to last — at least 12 months, or is expected to result in death. The disability need not be permanent, it need only last, or be expected to last, for one year or more.*

*An individual who files an application for disability insurance benefits must provide a medical report signed by a duly licensed physican. Such a report should contain* ***the applicant's medical history relating to the impairment or impairments which prevent work.*** *The report should contain a description of* ***a physical examination*** *and such supporting* ***laboratory data*** *needed to determine the nature and severity of the impairment. The evaluation criteria are helpful in determining the type of information needed. The medical report should not be limited to those clinical findings which are listed. All symptoms, signs, and laboratory findings which have a bearing on the impairment should be reported. Disability decisions cannot be made on the basis of clinical judgments relating to an applicant's diagnosis, prognosis, or remaining capacity to work* ***unless*** *the supporting* ***signs*** *or* ***laboratory findings*** *are also reported. Any fees which the physician may wish to charge for a medical report are the applicant's responsibility.*

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# ORGANIZATION

# 18th FMA Leadership Conference Attracts Record Number of Participants

FMA's 18th Leadership Conference for county medical society officers drew a record attendance of 139 persons. The conference was the first since 1975, and some observers believed it was one of the most successful conferences of its kind the FMA has ever sponsored.

Those in attendance at the sessions in the Orlando Hyatt House on January 27-28 represented 34 county medical societies and 98 per cent of the total FMA membership.

In remarks opening the conference, FMA President O. William Davenport, M.D., of Miami, said the Association's officers are hearing a lot of complaints from members about the standardized health insurance claim form enacted by the Legislature in 1977. In response, he said the FMA is sponsoring legislation to seek amendments to the law to allow attachments provided they contain the necessary information required by the form.

The President also stated that one of the main economic concerns of the public is health care cost containment, and he outlined plans for the integration of the nutrition theme in the overall FMA program for the year. There will be special programs on Nutrition at next May's FMA Annual Meeting, and there will be a special issue of *The Journal* on the subject in April. In addition, a TV film on nutrition will be produced.

The next speaker was FMA Secretary Robert E. Windom, M.D., of Sarasota, who announced that as a result of a special appeal by Dr. Davenport, FMA finished 1978 with a sufficient number of American Medical Association members to retain all seven seats in the AMA House of Delegates. A new FMA priority for this year, he said, will be to seek appointment of a physician with line authority, to a top level position in the Florida Department of Health and Rehabilitative Services.

### Cost of Medical Care

Current programs to control the cost of medical care were described by James F. Richards Jr., M.D., of Orlando, Chairman of the FMA Council on Medical Economics. Pointing out that the only major control physicians have over the cost of hospital care is the order sheet, Dr. Richards said a New York study shows that regulations of all sorts account for 25 percent of all hospital costs, and he sees "no reason to believe it is different here (in Florida)."

He described the National Voluntary Effort to control costs and the work of the Florida Committee on the Cost of Medical Care, which FMA organized and which meets about once a month.

Dr. Richards said Florida presents a special problem because (1) its high percentage of over-65 residents use many more hospital days than the population as a whole, (2) our census is growing (250,000 in 1978), and (3) 38,000,000 visitors to Florida in 1978 contribute to utilization of hospital days.

### Legislative Overview

In a legislative overview, FMA President-Elect Richard S. Hodes, M.D., of Tampa, who also serves in the Florida House of Representatives and currently as Speaker Pro tem, spoke of a "dichotomy of issues" which he said presents a "delicate lobbying issue which is difficult to resolve."

Such a problem occurs, he explained, when an organization first opposes certain legislation at the federal level on the ground that it should be a state government issue, then says "let us do it" when it does become a state issue.

Dr. Hodes observed that Florida's 38 million visitors a year translates into another 1 million permanent

residents as far as health care is concerned. He called it "amazing" that in a three-year period FMA was able tc achieve major legislative reforms to stem the professional liability insurance crisis, and he found it equally astounding that the FMA-sponsored bill creating medical liability mediation panels was so carefully fashioned that it was found to be "just barely" constitutional by the Florida Supreme Court.

As for the year ahead, the physician-legislator identified cost containment as "the gut issue of the 1979 legislative session." He predicted that health care providers will probably have to accept some kind of regulation.

### Public Relations Program

Public Relations Officer Vernon B. Astler, M.D., of Boynton Beach, listed several programs and projects the FMA has undertaken as part of the professionally-directed PR program that was launched three years ago. But equally important, he said, is individual physician involvement in community projects, such as participating in athletic team physicial examinations, speaking before civic groups, and taking part in immunization programs.

"As physicians we should be the first buffer against pain and suffering," he said, pointing out that office personnel are among the first contacts by patients in the health care delivery system.

An FMA-commissioned public opinion poll a few years ago showed that people still put high trust in their doctors, and they believe physicians are doing their best to provide top quality health care, but "we have to continue to earn that trust," he said.

The same survey showed that people are concerned about rising costs and impersonal approaches by their physicians.

Dr. Astler discussed the numbers of newspapers and radio and television stations and others that are using FMA-produced material. "We have taken PR out of the defensive and put it on the offensive," he concluded.

### Scientific Activities

Gerold L. Schiebler, M.D., Editor of *The Journal* and Chairman of the Committee on Scientific Publications, discussed the recent work of the Council on Scientific Activities and its component committees.

In discussing *The Journal,* the Editor announced another major award last fall in the Florida Magazine Association's annual contest. Special issues published in the past year have included those on Adverse Reactions to Plants in Florida, Otolaryngology and Orthopaedic Surgery. Other specials planned for 1979 include one of FMA Programs (February) and Nutrition (April).

The Committee on Continuing Medical Education has virtually completed work on the 105th Annual Meeting Scientific Program, which has been approved for 20 hours of AMA Category I and 20 hours of FMA Mandatory Credit. Several elements of the program will be oriented toward nutrition in keeping with FMA's current program theme.

The CME Committee, he continued, processed approximately 300 individual program approval applications during 1978 and approved specialty board certification as one pathway to meeting FMA's individual CME requirements.

Dr. Schiebler identified the FMA Committee on Medical Education as FMA's principal channel to the three medical schools in the state. That committee has been particularly concerned of late about the serious situation that exists as a result of the lack of available medical student loans and scholarships.

The Florida Medical Foundation's Committee on Medical Education is not actually a part of the Council on Scientific Activities, Dr. Schiebler said, but it has proved to be an important adjunct to the Association's scientific work. The Committee, as an organization accredited for CME, has been working with many program sponsors throughout Florida and has certified a number of programs for AMA Category I Credit.

In addition, the Foundation has accumulated, particularly for the benefit of small county medical societies and hospitals, the names of more than 300 Florida physicians who are willing to make scientific talks within their fields of expertise to professional audiences.

### Government Investigations

Past President Jack A. MaCris, M.D., of St. Petersburg, discussed government interference in organized medicine and various federal investigations to which the FMA has been subjected. He mentioned in particular government meddling in the areas of professional advertising, physician credentials and relative value studies.

"The government is undermining the groundwork the profession has established over the years," he said. "This leads to a decline in the level of practice, thence the level of public confidence in the profession."

Over the last year, he said, the FMA has been involved in seven separate federal investigations by the Justice Department, the Federal Trade Commission, the Federal Elections Commission, the Internal Revenue Service and the Postal Service.

He asked, "Is this a conspiracy by the federal government to harass us by using our own tax dollars?"

### Health Planning

Charles F. Tate, M.D., of Miami, Chairman of the FMA Committee on Health Systems Agencies, urged FMA members to become interested in HSAs. He encouraged county medical societies to establish liaison committees with HSAs, and said that FMA soon would begin publication of an HSA Newsletter.

HSA activities are being monitored by FMA staff, he observed, and county medical society staff members should attend all HSA meetings in their areas. There are nine HSAs in Florida, and he estimated that their administrative costs total about $9 million a year.

"We are overwhelmed by the volume thrown at us by planners," Dr. Tate lamented.

### National Health Insurance

James T. Cook Jr., M.D., of Marianna, Chairman of Florida's delegation to the AMA House of Delegates, discussed recent activities of the delegation.

He noted that the AMA and FMA have had different approaches to the prospect of national health insurance and he discussed how the FMA delegates had succeeded in winning AMA House of Delegates approval of Florida's resolution on national health insurance.

He credited fellow Delegate Joseph C. Von Thron, M.D., of Cocoa Beach, with swinging the necessary number of votes through an eloquent and moving speech on behalf of the Florida resolution on the floor of the AMA House at its meeting in Chicago in December.

### Professional Standards Review Organizations

The current status of Professional Standards Review Organizations in Florida was discussed by Dick L. Van Eldik, M.D., of Lake Worth, Chairman of the Council on Specialty Medicine. He described the background of the PSRO movement from the enactment of the Bennett Amendment in 1972, through the 1973 FMA resolution urging members not to participate, and the funding of the Dade-Monroe PSRO the following year.

Of the 12 PSROs in Florida, seven were conditional in December, 1978, and five were in planning. Of the latter some were due to become conditional early in 1979.

If PSROs do not function properly, the Secretary of HEW is required to appoint alternate PSROs which may not be medical societies, may not be subject to excessive influence by medical societies and may not reserve board positions for medical society representatives.

"This is where it becomes scary," he said.

### Impaired Physician Program

Ray E. Murphy, M.D., of Pompano Beach, Chairman of the Committee on Membership and Discipline, reviewed Florida's Sick Doctor Act and discussed medical society activities in other states geared to rehabilitating doctors afflicted with alcohol or drug addiction.

AMA statistics, Dr. Murphy advised, indicate that as many as one of every 10 physicians may have an alcohol problem. The Florida State Board of Medical Examiners has about a 65 per cent success rate in rehabilitating these physicians.

Dr. Murphy called upon the FMA to adopt a sick doctor program which he said might be called "Operation Repair" and that the program be patterned after a program already established in Georgia.

### Professional Advertising

John E. Thrasher, J.D., FMA Legal Counsel, presented a concise and informative review of the current situation regarding advertising by physicians and other professionals. He said a Federal Trade Commission administrative law judge's decision that the American Medical Association has no role in the regulation of physician advertising is pending before the FTC.

"George Orwell's 1984 has possibly arrived five years early," said Mr. Thrasher. However, he held out hope that the judge's recommendation, if it is adopted by the FTC, may not hold up in court.

Last year, the Florida Board of Medical Examiners authorized professional advertising in newspapers and other printed organs if it is not misleading, Mr. Thrasher said. Only recently, the BME modified its rule to permit access to radio and television, and it defined more specifically what is meant by "false, fraudulent and deceptive."

In the current legal climate, "it would be difficult for a medical society to regulate professional advertising unless it can be shown to be false, deceptive or misleading," the FMA attorney speculated.

### Legislative and Political Action

The program on Sunday morning, January 28, began with a session on state and national legislative activities including special guest speaker Rep. William V. (Bill) Chappell Jr., of Florida's Fourth Congressional District.

Mr. Chappell stated that the "free man has never had a greater responsibility" because "some things are going on to undermine the free enterprise system."

In particular, he mentioned the Ethics Bill. He said 33 members of Congress voted agianst it because one provision restricted to $8,500 a year the amount a congressman can earn from his private business or profession. The philosophy behind this, he contended, was to discourage physicians and other professional people from running for public office.

"We are going to have in public office people with no experience with the free enterprise system," which he called "the greatest system on the face of the earth."

A physician in the audience asked how doctors should become involved in congressional re-election campaigns.

"First, I would want you to give me your personal assistance," Mr. Chappell replied. Secondly, he added, "your contribution in the form of money" would be welcome.

In answer to another question, Mr. Chappell stated that he favors separating health from the U.S. Department of HEW.

### Iron Triangle

James B. Perry, M.D., of Fort Lauderdale, who presided at the Sunday morning session, likened state legislative issues confronting the Association to an "iron triangle." This includes the Sunset Law under which the operations of the Board of Medical Examiners will be reviewed; the Nurse Practice Act; and cost containment legislation. One cannot be affected without the other two being adversely attacked or dramatically changed.

"We are going to have to follow a thin tightrope," Dr. Perry, Chairman of the Council on Legislation and Regulations, predicted.

### National Legislation

Past President Louis C. Murray, M.D., of Orlando, Chairman of the Committee on National Legislation, reviewed the work of the 95th Congress and gave a preview of what is in store this year and next.

Working with members of Florida's congressional delegation the last two years, FMA was successful in helping bring about elimination of extension of certificate of need to doctors offices from the health planning amendments. Also, the definition of "provider" with regard to appointments to health planning boards was modified.

Health planning, hospital expenditure caps and the child helath assessment bill are on the agenda for the 96th Congress. As for area health planning, Dr. Murray said, "we can expect Senator Kennedy to push hard," although he may be persuaded to accept language that does not include certificate of need.

"This all adds up to what should be a very busy year for FMA key contact physicians," Dr. Murray concluded.

### State Legislation

David C. Lane, M.D., of Fort Lauderdale, Chairman of the Committee on State Legislation, said that as a result of last year's state elections, FMA will still have a number of friends in the Senate, but the "House situation looks bad."

In the area of cost containment, Dr. Lane, a former State Senator, predicted that FMA will have to offer alternatives. As for the Sunset Law under which the Florida State Board of Medical Examiners will be reviewed, Dr. Lane could make no predictions, but indicated that the Board's integrity and actions may be in great jeopardy.

After last November's election there is not much encouragement for a separate Department of Health, he continued, and a "surgeons performance bill" is among issues FMA will have to contend with.

### Political Action

W. W. Thompson, M.D., of Fort Walton Beach, President of the Florida Medical Political Action Committee, discussed FLAMPAC activities since its establishment in 1962 as a voluntary, non-profit, independent and autonomous organization.

In the past year, FLAMPAC has been busy establishing a political education program in each community. Under a reorganization plan, candidate advisory boards for state and national elections were established under the FLAMPAC Board.

"The Auxiliary members have played an important role which we plan to enlarge in the next two years," he said. "The Auxiliary members who are members of FLAMPAC have played an increasingly important role. We have plans to increase their participation in candidate advisory committees for state and national elections.

"We have had a great cooperative spirit," Dr. Thompson recalled.

### County Medical Societies

A discussion of "County Medical Society Programs and Problems" provided the finale for the Leadership Conference. This included a look at the activities and problems of various size county medical societies. Participating were: Walter C. Jones, M.D., President, Dade County Medical Association; Robert K. Wilson Jr., M.D. President, Escambia County Medical Society; and Frank J. Lill, M.D., President, Volusia County Medical Society.

# Preliminary Program
# 105th Florida Medical Association Annual Meeting
# Diplomat Hotel — Hollywood
# May 23-27, 1979

## WEDNESDAY AFTERNOON — MAY 23

SECTION ON CANCER AND NUTRITION

(Co-sponsored by Florida Society of Clinical Oncologists, Florida Academy of Family Physicians, and FMA Ad Hoc Committee on Nutrition)
Wednesday — 1:30 p.m. to 4:00 p.m.
Phillip C. Smith, M.D., Boca Raton
Program Chairman

**"The Role of the Government in Identifying and Controlling Carcinogens in the American Diet"** (Speaker to be Announced).

**"The Spectrum of Nutritional Deficiencies in the Patient with Cancer,"** Everett V. Sugarbaker, M.D., Associate Professor, Department of Surgical Oncology, University of Miami School of Medicine, Miami.

**"Nutrition in Patient Response to Cancer Therapy,"** Ted Copeland, M.D., Professor of Surgery, University of Texas Medical School, Houston, Texas.

**"Enteral and Parenteral Methods of Nutrition,"** Ted Copeland, M.D., Houston, Texas.

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SECTION ON BASIC LIFE SUPPORT CERTIFICATION
(Co-sponsored by Florida Chapter, American College of Emergency Physicians, in Cooperation with the Heart Association of Greater Miami)
Wednesday — 1:00 p.m. to 4:15 p.m.

Basic life support is an emergency first aid procedure that consists of the recognition of respiratory and cardiac arrest and starting the proper application of cardiopulmonary resuscitation to maintain life until a victim recovers sufficiently to be transported or until advanced life support is available.

The 1976 FMA House of Delegates encouraged all Florida physicians to become certified in life support. A registrant who successfully completes this session will receive certification in basic life support from the American Heart Association.

This course is practical in nature and registrants should be prepared to participate actively. A demonstration of practical skills is a prerequisite for successful course completion and certification.

Admission to this session is by advance registration, and only 60 participants can be accommodated. Preference in registration will be given to physicians, with spouses and other family members accepted on an available-space basis after April 15, 1979.

Physicians wishing to attend this session should notify Mr. Garry L. Briese, Executive Director, Florida Chapter, American College of Emergency Physicians, 600 Courtland Street, Suite 420, Orlando, Fla. 32804.

SECTION ON EMERGENCY MEDICINE
(Co-sponsored by Florida Chapter, American College of Emergency Physicians)
Wednesday — 1:00 p.m. to 4:15 p.m.
George Musser, M.D., Miami
Program Chairman

**"Mushrooms: Poisonings and Hallucinations,"** Kenneth Lampe, M.D., Department of Pharmacology, University of Miami School of Medicine, Miami.

**"Street Drugs: Current Problems,"** James McKuen, Executive Director, Up-Front, Inc. (an Information and Education Program on Drugs), Miami.

**"Ciguatera (Fish) Poisoning,"** Arthur Anderson, M.D., Department of Emergency Medicine, Imperial Point Hospital, Fort Lauderdale.

**"The Management of Phencyclidine Overdoses,"** George Musser, M.D., Department of Emergency Medicine, Cedars of Lebanon Hospital, Miami.

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## THURSDAY AFTERNOON — MAY 24

SYMPOSIUM ON NUTRITION
(Co-sponsored by FMA Ad Hoc Committee on Nutrition, Florida Society of Clinical Oncologists, and Florida Academy of Family Physicians)
Thursday — 1:30 p.m. to 5:00 p.m.
Yank D. Coble, Jr., M.D., Jacksonville
Program Chairman

***I. The Art of a Nutritional Diagnosis***

**"What Nutritional Diagnoses Are You Missing?** George Christakis, M.D., Professor of Nutrition, University of Miami School of Medicine, Miami.

**Quiz**

***II. Clinical Nutrition Problems and What You Tell Your Patients***

**"Obesity: Medical and Surgical Management,"** Xavier Pi-Sunyer, M.D., Associate Professor, St. Lukes Hospital, New York, N.Y.

**"Nutrition in Pregnancy,"** Charles Mahan, M.D., Professor of Obstetrics, University of Florida College of Medicine, Gainesville.

**"Hyperlipidemia and Arteriosclerosis,"** Sami Hashem, M.D., Professor of Medicine, Columbia University College of Physicians and Surgeons, New York, N.Y.

**"Gastrointestinal Disease,"** James Cerda, M.D., Professor of Medicine, University of Florida College of Medicine, Gainesville.

**"Fad Diets,"** Victor Herbert, M.D., Professor of Medicine, Mt. Sinai School of Medicine, New York, N.Y.

***III. Questions and Answer Panel***

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|---|---|
| George Christakis, M.D. | Sami Hashem, M.D. |
| Xavier Pi-Sunyer, M.D. | James Cerda, M.D. |
| Charles Mahan, M.D. | Victor Herbert, M.D. |

SECTION ON RHEUMATOLOGY
(Co-sponsored by Florida Society of Rheumatology)
Thursday — 1:30 p.m. to 4:00 p.m.
Selden Longley, M.D., Gainesville
Program Chairman

**"Approach to the Rheumatic Patient,"** Prof. W. Watson Buchanon, Consultant in Charge, Centre for Rheumatic Diseases, Glasgow, Scotland.

**"Recreational Rheumatism,"** Richard S. Panush, M.D., and Selden Longley, M.D., University of Florida College of Medicine, Gainesville.

**"Juvenile Rheumatoid Arthritis,"** Bernard Germain, M.D., University of South Florida College of Medicine, Tampa.

**"Joint Imagining in Rheumatic Disorders,"** Roy Altman, M.D., University of Miami School of Medicine, Miami.

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SECTION ON INTERNAL MEDICINE
(Co-sponsored by American College of Physicians and Florida Society of Internal Medicine)
Thursday — 1:30 p.m. to 5:30 p.m.
Eugene T. Davidson, M.D., Lakeland
Program Chairman

**"Advances in Clinical Neuroendocrinology,"** Seymour Reichlin, M.D., Chairman of the Department of Medicine and Chief of the Division of Endocrinology, Tufts University School of Medicine, Boston, Mass.

**"Cardiac Arrhythmias and the Newer Anti-Arrhythmic Drugs,"** Henry McIntosh, M.D., The Watson Clinic, Lakeland.

**"Neurological Problems Most Frequently Missed by the Internist,"** Robert Schwartzman, M.D., Chief of Neurology, University of Texas Medical School, San Antonio, Texas.

**"Neuroendocrine Pharmacology as it Pertains to the Endocrinologist, the Cardiologist, and the Neurologist: A Review of Drugs Used in the Treatment of Neurological Disorders"** (Panel)

**Moderator:**
Euguene T. Davidson, M.D., Department of Endocrinology, The Watson Clinic, Lakeland.

**Panelists:**
Seymour Reichlin, M.D., Boston, Mass.
Henry McIntosh, M.D., Lakeland
Robert Schwartzman, M.D., San Antonio, Texas.

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SECTION ON CHEST MEDICINE
(Co-sponsored by Florida Chapter, American College of Chest Physicians, and Florida Thoracic Society)
Thursday — 1:30 p.m. to 5:30 p.m.
Allan L. Goldman, M.D., Tampa
Marcos Barrocas, M.D., Miami
Program Co-Chairmen

**Introduction** — Allan L. Goldman, M.D., Associate Professor of Medicine and Chief, Pulmonary Disease Service, University of South Florida College of Medicine, Tampa.

**"Infective Endocarditis,"** Louis Weinstein, M.D., Physician and Director of the Clinical Services, Division of Infectious Disease, Peter Bent Brigham Hospital, Boston, Mass.

**"Legionnaire's Disease,"** Joseph H. Bates, M.D., Chief of the Medical Service, Veterans Administration Hospital, Little Rock, Ark.

**"The Immunocompromised Host,"** Jay Sanders, M.D., Professor of Medicine, University of Miami School of Medicine, Miami.

**"Tuberculosis Therapy Update,"** David A. Solomon, M.D., Assistant Professor of Medicine, Pulmonary Disease Section, Department of Internal Medicine, Veterans Administration Hospital, Tampa.

## FRIDAY MORNING — MAY 25

DIALOGUE
(Presented through the Courtesy of Pfizer Laboratories and Roerig Divisions of Pfizer Pharmaceuticals)

Each one-hour segment of Dialogue will begin with a five or ten-minute overview of a topic of current interest by a guest speaker. The remainder of each hour will include audience questions.

**"What's New in Allergy,"** Philip R. Glade, M.D., Clinical Professor of Medicine, University of Miami School of Medicine, Miami.

**"Acute Complications of Diabetes,"** Stephen Podolsky, M.D., Chief, Endocrinology & Metabolism Section, Boston VA Outpatient Clinic, and Consultant in Diabetes, West Roxbury VA Hospital, Boston, Mass.

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SECTION ON ENDOCRINOLOGY
(Co-sponsored by Florida Endocrine Society)
Friday — 8:30 a.m. to 10:30 a.m.
Marvin C. Mengel, M.D., Orlando
Program Chairman

**"The Decline of the Glucose Tolerance Test,"** Eugene Davidson, M.D., Chief of Endocrinology, Watson Clinic, Lakeland.

**"Neural Control of the Pituitary Gland — Practical Considerations,"** Seymour Reichlin, M.D., Ph.D., Endocrinology Division, New England Medical Center Hospital; and Department of Medicine, Tufts University School of Medicine, Boston, Mass.

**"Radiation and Cancer of the Thyroid,"** Samuel Crockett, M.D., Associate Director of Medical Education, Orlando Regional Medical Center, Orlando.

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SECTION ON ORTHOPEDIC SURGERY
(SECTION I)
(Co-sponsored by Florida Orthopedic Society)
Friday — 8:00 a.m. to 10:50 a.m.
H. Gerard Siek Jr., M.D., Clearwater
Program Chairman

**Welcome** — James F. Richards Jr., M.D., President, Florida Orthopedic Society, Orlando.

**"Muscle Pedicle Bone Graft Technique,"** G. E. Vega, M.D., Tampa.

**"The Modern Charnley Technique of Trochanteric Reattachment — 350 Cases,"** Louis P. Brady, M.D., Orlando.

**"Hip Hemi-Arthroplasty With the Universal Proximal Femur Prosthesis,"** Nile R. Lestrange, M.D., Ft. Lauderdale.

**"How Nuclear Medicine Can Help the Orthopedic Surgeon,"** Ronald Levy, M.D., Miami.

**"Operative Arthroscopy — Low to No Morbidity,"** John P. Barrett Jr., M.D., Clearwater.

**"Loss of Active Adduction of the Little Finger Following Trauma,"** James D. Murphy, M.D., Tampa.

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SECTION ON PSYCHIATRY
(Co-sponsored by Florida Council of District Branches of the American Psychiatric Association)
Friday — 8:00 a.m. to 10:45 a.m.
Sanford Jacobson, M.D., Miami
Program Chairman

**"Biochemical Factors in Schizophrenia and Orthomolecular Therapy,"** Sanford Jacobson, M.D., Clinical Associate Professor of Psychiatry, University of Miami School of Medicine, Miami.

**"Lunar Influences on Behavior,"** Arnold Lieber, M.D., Clinical Assistant Professor of Psychiatry, University of Miami School of Medicine, Miami.
**"Developments in Psychopharmacology,"** Benjamin Brauzer, M.D., Associate Professor of Psychiatry, University of Miami School of Medicine, Miami.
**"Obesity and Related Disorders"** (Panel)
**Panelists:**
William A. Nixon, M.D., Clinical Associate Professor of Psychiatry, University of Miami School of Medicine, Miami.
Sanford Jacobson, M.D., Miami.
Other Panelists to be Announced.

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SECTION ON NUCLEAR MEDICINE
(Co-sponsored by Florida Association of Nuclear Physicians)
Friday — 8:00 a.m. to 10:30 a.m.
Marvin Guter, M.D., Miami
Program Chairman
***(Note: The program for this Section will be presented first in Spanish, then in English)***
**"Gamagrafia Cardiaca: Metodo no Invasivo de Descarte en Enfermedad Coronaria,"** Ernest Garcia, Ph.D., Assistant Professor of Radiology, University of Miami School of Medicine; and Division of Nuclear Medicine & Ultrasound, Jackson Memorial Hospital, Miami.
**"Gamagrafia Biliar y Ultrasonido,"** Dino Morello, M.D., Instructor in Radiology, University of Miami School of Medicine; and Division of Nuclear Medicine & Ultrasound, Jackson Memorial Hospital, Miami.
**"Nuclear Cardiology: Non-Invasive Screening for Coronary Artery Disease,"** Ernest Garcia, Ph.D., Miami.
**"Biliary Nuclear Medicine and Ultrasound,"** Edward Eikman, M.D., Associate Professor of Medicine, University of South Florida College of Medicine; and Veterans Administration Hospital, Tampa.

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SECTION ON FAMILY PRACTICE
(Co-sponsored by Florida Academy of Family Physicians)
Friday — 8:30 a.m. to 10:45 a.m.
**"Proper Nutrition in the Aged,"** Vernon Young, M.D., Professor of Nutritional Bio-Chemistry, Massachusetts Institute of Technology, Cambridge, Mass.
**"Alcohol and Nutrition,"** Charles Lieber, M.D., Professor of Medicine, Mt. Sinai Medical School, New York, N.Y.
**"Nutritional Management in Diabetes,"** Jay Skyler, M.D., Professor of Pediatrics, University of Miami School of Medicine, Miami; and John Malone, M.D., Professor of Pediatrics, University of South Florida College of Medicine, Tampa.
**"The Vitamin and Mineral — Use and Misuse,"** Victor Herbert, M.D., Professor of Medicine, Mt. Sinai Medical School, New York, N.Y.

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## FRIDAY AFTERNOON — MAY 25

SECTION ON THORACIC AND CARDIOVASCULAR SURGERY
(Co-sponsored by Florida Society of Thoracic and Cardiovascular Surgeons)
Friday — 1:30 p.m. to 4:00 p.m.
Richard G. Connar, M.D., Tampa
Program Chairman
**"Current Concepts in the Management of Chest Trauma,"** Watts R. Webb, M.D., Professor and Chairman, Department of Surgery Tulane University School of Medicine, New Orleans, La.
**Questions and Answers**
**"Update Coronary Artery Surgery,"** Dennis F. Pupello, M.D., Director of Cardiac Surgery, Tampa General Hospital, Tampa.
**"Surgical and Pharmacological Management of Acute Complications of Coronary Artery Disease,"** Watts R. Webb, M.D.

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SECTION ON OTOLARYNGOLOGY
(Co-sponsored by Florida Society of Otolaryngology)
Friday — 1:30 p.m. to 5:30 p.m.
James C. Garlington, M.D., Gainesville
Program Chairman
**"Brain Stem Evoked Audiometric Potentials,"** Charles Berlin, M.D., Professor of Otolaryngology, Louisiana State University School of Medicine, New Orleans.

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SECTION ON RADIOLOGY
(SECTION I)
(Co-sponsored by Florida Radiological Society)
Friday — 1:30 p.m. to 4:45 p.m.
Arthur D. Graham, M.D., Tampa
Program Chairman
**Welcome** — John T. Johnson, M.D., President, Florida Radiological Society, Sanford.
**"The Modern Radiologic Diagnosis of Abdominal Abscess,"** Albert A. Moss, M.D., Associate Professor of Radiology, University of California, San Francisco, California.
**"Bone Scanning in Benign and Malignant Disorders,"** Lawrence R. Muroff, M.D., Clinical Associate Professor of Radiology, University of South Florida College of Medicine, Tampa.
**"Percutaneous Cholangiography,"** William C. Walker, M.D., Clinical Associate, University of South Florida College of Medicine, Tampa.
**"Radiographic Analysis of Patterns of Small Bowel Abnormalities,"** Albert A. Moss, M.D.
**"Thromboembolic Disease — Lung Scans, Nuclear Venograms, and I-125, 5 Fibrinogen Testing,"** Lawrence R. Muroff, M.D., Tampa.

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SECTION ON ENDOCRINOLOGY AND NUCLEAR MEDICINE
(Co-sponsored by Florida Endocrine Society and Florida Association of Nuclear Physicians)
Friday — 2:00 p.m. to 4:30 p.m.
Marvin Guter, M.D., Miami
Marvin C. Mengel, M.D., Orlando
Program Co-Chairman
**"Thyroid Function Testing with TRH,"** Fuad Ashkar, M.D., Clinical Associate Professor of Medicine and Radiology, University of Miami School of Medicine, Miami.
**"Non-Invasive Adrenal Assessment,"** George Jacobi, M.D., Miami.
**"Adrenal Scanning — A Valuable New Diagnostic Tool,"** Faith Block, Instructor in Nuclear Medicine, University of Miami School of Medicine, Miami.

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SECTION ON PEDIATRIC URINARY TRACT DISEASE
(Co-sponsored by Florida Urological Society and Florida Pediatric Society)
Friday — 1:30 p.m. to 4:45 p.m.
Roy P. Finney, M.D., Tampa
Jose Strauss, M.D., Miami
Program Co-Chairmen
**Hematuria and Proteinuria in Pediatrics,"** Helen Gorman, M.D., Assistant Professor of Pediatrics and Associate Director, Division of

Pediatric Nephrology, University of Miami School of Medicine, Miami.
**"The Current Approach to Urinary Tract Infection in Infants, Children and Adolescents,"** George A. Richard, M.D., Professor of Pediatrics and Chief, Pediatric Renal-Urology, University of Florida College of Medicine, Gainesville.
**"Urologic Management of Meningomyelocele,"** Ronald W. Sadlowski, M.D., Assistant Professor of Surgery (Urology), University of South Florida College of Medicine, Tampa.
**"The International Reflux Study,"** Dixon Walker III, M.D., Professor of Surgery (Urology) and Professor of Pediatrics, University of Florida College of Medicine, Gainesville.

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SECTION ON PATHOLOGY
(Co-sponsored by Florida Society of Pathologists)
Friday — 1:30 p.m. to 5:30 p.m.
Morton J. Robinson, M.D., Miami Beach
Program Chairman

**"Modern Solutions to Common Endocrine Problems,"** Joseph Keffer, M.D., Director of Pathology, St. Francis Hospital, Miami Beach.
**"The Rationale for the Progressing Thyroid Profile,"** Joseph Keffer, M.D., Miami Beach
**Alfred Lewis Award Lecture** — (Speaker to be Announced).

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SECTION ON PREVENTIVE MEDICINE
(Co-sponsored by Florida Society for Preventive Medicine)
Friday — 1:30 p.m. to 5:00 p.m.
James T. Howell, M.D., Palm Springs
Program Chairman

**"Florida's 'State of Public Health',"** E. Charlton Prather, M.D., M.P.H., State Health Officer and Director, Health Program Office, Department of Health and Rehabilitative Services, Tallahassee.
**"Patterns of Consumption — Tuberculosis,"** Clifford H. Cole, M.D., M.P.H., Director, Tuberculosis Control Office, Department of Health and Rehabilitative Services, Jacksonville.
**Reactor:**
David A. Solomon, M.D., Chairman, Florida Committee on Quality Care for the Tuberculosis Patient, Tampa.
**"Sexually Transmissible Diseases in Southeast Florida,"** J. Q. Cleveland, M.D., M.P.H., Associate Chief, Office of Disease Prevention, Dade County Health Department, Miami.
**"Review of Epidemiological Problems in the State of Florida,"** S. Stryker, M.D., Epidemiologist Information Specialist, National Center for Disease Control, Atlanta, Ga.

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SECTION ON COLON AND RECTAL SURGERY
(Co-sponsored by Florida Society of Colon and Rectal Surgeons)
Friday — 1:30 p.m. to 4:30 p.m.
Walter W. Hamilton, M.D., St. Petersburg
Program Chairman

**"Surgical Management of Ulcerative Colitis or Crohn's Disease,"** Victor Fazio, M.D., Head, Department of Colon and Rectal Surgery, The Cleveland Clinic, Cleveland, Ohio.
**"Thrombosed External Hemorrhoids: Treatment with Cryotherapy and Surgical Drainage,"** James Barron, M.D., Colon and Rectal Surgeon, Boca Raton, Fla.; and James Robert Barron, M.D., Resident in Surgery, Ochsner Clinic, New Orleans, La.
**"Choice of Operation for Rectal Cancer,"** Victor Fazio, M.D., Cleveland, Ohio.
**Panel on Ano-Rectal Surgery**
**Moderator:** Shed H. Roberson, M.D., Colon and Rectal Surgeon, Daytona Beach, Fla.
**"Anal Ulcers and Difficult Anal Stenosis,"** Romel DeMorais, M.D., Colon and Rectal Surgeon, Tampa, Fla.
**"Extensive Acute Hemorrhoidal Disease,"** Sergio Larach, M.D., Colon and Rectal Surgeon, Orlando, Fla.
**"Acute Rectal Suppurations,"** Harvey Shub, M.D., Colon and Rectal Surgeon, Orlando, Fla.

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SECTION ON ORTHOPEDIC SURGERY
(SECTION II)
(Co-sponsored by Florida Orthopedic Society)
Friday — 1:30 p.m. to 5:20 p.m.
H. Gerard Siek Jr., M.D., Clearwater
Program Chairman

**"Malignant Hyperthermia,"** David A. C. Rudloff, M.D., Melbourne.
**"Physical Examinations in the High School Athlete,"** Arthur J. Pearl, M.D., Miami.
**"Correctible Elbow Lesions as Seen in Professional Baseball Pitchers,"** Peter A. Indelicato, M.D., Gainesville.
**"Problems of the Pre-Adolescent Athlete and Determination of Playability,"** Fred Allman, M.D., Atlanta, Ga.
**"Orthopedic Care of Running Injuries,"** Phillip L. Parr, M.D., Gainesville.
**"Contrast Tomography in Evaluating Knee Injuries in Athletes,"** Charles E. Virgin, M.D., Miami.
**"Effect on Hyperextension on Wearers of Football Helmets"** (Movie) — Herb Virgin, M.D., Miami.

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SECTION ON NEONATAL-PERINATOLOGY
(Co-sponsored by Florida Society of Neonatal-Perinatologists)
Friday — 1:30 p.m. to 5:00 p.m.
John S. Curran, M.D., Tampa
Program Chairman
***"Nutrition of the Neonate"***

**"Problems, Prospectives, and Advances in Neonatal Nutrition,"** Lewis A. Barness, M.D., Professor and Chairman, Department of Pediatrics, University of South Florida College of Medicine, Tampa; and Chairman, Committee on Nutrition, American Academy of Pediatrics.
**"Recent Developments in the Application of Breast Feeding to Neonatal Care,"** Roberto Sosa, M.D., Assistant Professor of Pediatrics/Neonatology, University of South Florida College of Medicine, Tampa; and Director of the Neonatal Service, All Children's Hospital, St. Petersburg.
**"Clinical Experiences and Routine Total Parenteral Nutrition in Very Low Birth Weight Infants,"** Keith F. Kanarek, M.D., Director of Newborn Services, Orlando Regional Medical Center, Orlando.
**"Hyperglycemia in Neonates,"** Stephen L. Goldman, M.D., Assistant Professor of Pediatrics/Neonatology, University of Miami School of Medicine, Miami.
**"Vitamin E and the Premature Infant: Fact or Fiction,"** John S. Curran, M.D., Associate Professor of Pediatrics/Neonatology, University of South Florida College of Medicine, Tampa.

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SECTION ON RADIATION THERAPY
(Co-sponsored by Florida Radiological Society)
Friday — 1:30 p.m. to 5:30 p.m.
Kenneth E. Ellingwood, M.D., Gainesville
Program Chairman

**"Implant Results Using Iridium 192 for Treatment of the Oropharynx, Hypopharynx, Larynx,"** A. Visar Syed, M.D., Department of Radiation Medicine, University of Southern California Medical Center, Los Angeles, Calif.

**"Prostate Cancer — Treatment with External Beam and $I^{125}$,"** Leonard Shukovsky, M.D., Fred J. Woods Radiation Therapy Center, Tampa.

**"Prostate Cancer — Treatment with External Beam,"** Kenneth F Ellingwood, M.D., Assistant Professor of Radiology, Division of Radiation Therapy, University of Florida College of Medicine, Gainesville.

**"Prostate Cancer — Treatment with $I^{125}$,"**
Special Discussant: Komanduri K. Charyulu, M.D., Professor of Radiology, Division of Radiation Therapy, University of Miami School of Medicine, Miami.

**"$I^{125}$ Implant for Pancreas Cancer,"** A. Visar Syed, M.D., Los Angeles, Calif.

**"The Use of Computerized Tomography in Treatment Planning,"** Herbert D. Kerman, M.D., Department of Radiology, Halifax Hospital Medical Center, Daytona Beach, Fla.

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DIALOGUE
(Presented through the Courtesy of Pfizer Laboratories and Roerig Divisions of Pfizer Pharmaceuticals)

Each one-hour segment of Dialogue will begin with a five- or ten-minute overview of a topic of current interest by a guest speaker. The remainder of each hour will include audience questions.

**"Infectious Diseases,"** Vincent T. Andriole, M.D., Professor of Medicine and Co-Chief, Division of Infectious Diseases, Yale University School of Medicine, New Haven, Conn.

**"Treatable Aspects of Senility,"** Fred Charatan, M.D., Chief of Psychiatry, Jewish Institute for Geriatric Care, New Hyde Park, N.Y., and Associate Professor of Clinical Psychiatry, State University of New York, Stonybrook, N.Y.

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SECTION ON NEPHROLOGY
(Co-sponsored by Florida Society of Nephrology)
Friday — 1:30 p.m. to 5:30 p.m.
John E. Cunio, M.D., Miami
Program Chairman

**(Program to be Announced)**

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NUTRITION WORKSHOPS
(Co-sponsored by FMA Ad Hoc Committee on Nutrition, and Florida Academy of Family Physicians)
Friday — 1:30 p.m. to 5:00 p.m.

The five Nutrition Workshops will afford physicians the opportunity to "ask the experts" questions pertaining to clinical nutrition. Each workshop will last about 1 hour 45 minutes and will be repeated. Advance registration is required at a special registration facility in the FMA registration area of the Diplomat Hotel.

**Workshop I**
***"Parenteral Nutrition"***

**Discussion Leader:** Everett V. Sugarbaker, M.D., Associate Professor, Department of Surgical Oncology, University of Miami School of Medicine, Miami.

**Workshop II**
***"Diabetes and Lipids"***

**Discussion Leaders:** Jay Skyler, M.D., Professor of Pediatrics, University of Miami School of Medicine, Miami; and John Malone, M.D., Professor of Pediatrics, University of South Florida College of Medicine, Tampa.

**Workshop III**
***"Obesity"***

**Discussion Leaders:** Sami Hashem, M.D., Professor of Medicine, Columbia University College of Physicians and Surgeons, New York, N.Y.; and Xavier Pi-Sunyer, M.D., Associate Professor, St. Luke's Hospital, New York, N.Y.

**Workshop IV**
***"Fads vs. Facts"***

**Discussion Leaders:** Victor Herbert, M.D., Professor of Medicine, Mt. Sinai Medical School, New York, N.Y.; and Donald M. Macdonald, FMA Ad Hoc Committee on Nutrition, Clearwater.

**Workshop V**
***"Office Nutrition"***

**Discussion Leaders:** Victor Herbert, M.D., Professor of Medicine, Mt. Sinai Medical School, New York, N.Y.; and Donald M. Macdonald, FMA Ad Hoc Committee on Nutrition, Clearwater.

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## SATURDAY MORNING — MAY 26

SECTION ON NEUROLOGY
(Co-sponsored by Florida Society of Neurology)
Saturday — 8:00 a.m. to 12:00 noon
Jacob Green, M.D., Jacksonville
Program Chairman

**"Quality Control in EEG — A National Need,"** Eric Gibbs, M.D., Chicago, Ill.

**"Dopler Scanning System for the Non-invasive Discovery of Extra Cranial Carotid Disease or Stroke Screening,"** M. W. Kilgore, M.D., Jacksonville.

**"Brain Stem Auditory Evoked Potentials, Visual Evoked Potentials and Other Far Field Responses"** or **"Wave of the Future,"** Vinod Deshmukh, M.D., Jacksonville.

**Roundtable Discussion**

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SECTION ON OBSTETRICS AND GYNECOLOGY
(Co-sponsored by Florida Obstetric and Gynecologic Society)
Saturday — 8:30 a.m. to 11:45 a.m.
James M. Ingram, M.D., Tampa
Program Chairman

**"Nutrition in the Pregnant or Lactating Woman,"** William J. Darby, M.D., Ph.D., President, Nutrition Foundation, Inc., New York, N.Y.; and Professor of Nutrition, Department of Biochemistry, Vanderbilt University, Nashville, Tenn.

**"Nutrition for the Now Generation,"** Howard Appledorf, Ph.D., Professor of Human Nutrition, Department of Food Science and Human Nutrition, University of Florida, Gainesville.

**"Nutrition in the Teen-age and Post-menopausal Woman,"** Wiliam J. Darby, M.D., Ph.D.

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SECTION ON PLASTIC AND RECONSTRUCTIVE SURGERY
(Co-sponsored by Florida Society of Plastic and Reconstructive Surgery)
Saturday — 8:00 a.m. to 10:00 a.m.
S. Anthony Wolfe, M.D., Miami
Program Chairman

**"Microsurgery Update,"** Phillip George, M.D., Clinical Instructor in Plastic and Reconstructive Surgery, University of Miami School of Medicine; Hollis Caffee, M.D., Assistant Professor of Plastic Surgery, University of Florida College of Medicine, Gainesville; and Felix Freshwater, M.D., Resident, University of Miami School of Medicine, Miami.

**"Breast Reconstructive Surgery Update,"** Walter Mullin, M.D., Clinical Instructor in Plastic and Reconstructive Surgery, University of Miami School of Medicine; Craig Bass, M.D., Clinical Instructor in Plastic and Reconstructive Surgery, University of Miami School of Medicine; Hollis Caffee, M.D., Assistant Professor of Plastic Surgery,

University of Florida College of Medicine, Gainesville; and Claude Noriega, M.D., Clinical Assistant Instructor in Plastic and Reconstructive Surgery, University of Miami School of Medicine, Miami.
**"Maxillofacial and Craniofacial Update,"** Mutaz Habal, M.D., Professor of Plastic Surgery, University of South Florida College of Medicine, Tampa; and S. Anthony Wolfe, M.D., Clinical Assistant Professor of Plastic and Reconstructive Surgery, University of Miami School of Medicine, Miami.
**"A New Treatment for Congenital Giant Hairy Nevus,"** Dale Dubin, M.D., Tampa.

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SECTION ON NEUROSURGERY
(Co-sponsored by Florida Neurosurgical Society)
Saturday — 8:00 a.m. to 12:30 p.m.
Jack Maniscalco, M.D., Tampa
Program Chairman
**"Interactions with the State Legislature and the Florida Medical Association,"** Gerold L. Schiebler, M.D., Gainesville; David C. Lane, M.D., Fort Lauderdale; and Florida Medical Association Officers and Staff.
**Joint Symposium on Stroke** (Co-sponsored by Florida Neurosurgical Society, Florida Society of Neurology, and American Heart Association, Florida Affiliate)
(Speakers to be Announced)

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SECTION ON SURGERY
(Co-sponsored by Florida Chapter, American College of Surgeons, and Florida Association of General Surgeons)
Saturday — 9:00 a.m. to 11:00 a.m.
Arthur K. Waltzer, M.D., Tampa
Program Chairman
**"Newer Concepts and Update of Antibiotic Usage in the Practice of Surgery,"** Ronald Nichols, M.D., Department of Surgery, Tulane University School of Medicine, New Orleans, La.

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SECTION ON CLINICAL ONCOLOGY
(Co-sponsored by Florida Society of Clinical Oncologists)
Saturday — 9:00 a.m. to 10:30 a.m.
Phillip C. Smith, M.D., Boca Raton
Program Chairman
**Introduction** — Phillip C. Smith, M.D., Boca Raton.
**"Colorectal Carcinoma,"** Leonard Gunderson, M.D., Assistant Professor, Harvard Medical School, Boston, Mass.
**"Carcinoma of the Pancreas,"** Robert Kaplan, M.D., Chief, Department of Oncology, Division of Gastroenterology, University of Miami School of Medicine, Miami.

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SECTION ON UROLOGY
(Co-sponsored by Florida Urological Society)
Saturday — 9:00 a.m. to 10:30 a.m.
Roy P. Finney, M.D., Tampa
Program Chairman
**Milton Coplan Pyelogram Hour**

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SECTION ON RADIOLOGY
(SECTION II)
(Co-Sponsored by Florida Radiological Society)
Saturday — 8:00 a.m. to 11:00 a.m.
Arthur D. Graham, M.D., Tampa
Program Chairman
**"Quality Control in Radiology"** — DuPont Company
**"The Radiologic Evaluation of Acute Cholecystitis,"** Thomas A. Okulski, M.D., Assistant Professor of Radiology, University of South Florida College of Medicine, Tampa.
**"The Double — Contrast Examination of the Upper Gastrointestinal Tract,"** Albert A. Moss, M.D., Associate Professor of Radiology, University of California, San Francisco, California.
**"Basic Nuclear Cardiology: What It Can Do; Where It Is Going,"** Lawrence R. Muroff, M.D., Clinical Associate Professor of Radiology, University of South Florida College of Medicine, Tampa.

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SECTION ON OPHTHALMOLOGY
(Co-sponsored by Florida Society of Ophthalmology)
Saturday — 9:00 a.m. to 10:30 a.m.
G. S. Guggino, M.D., Tampa
Program Chairman
**"Ultrasound and Nuclear Medicine in Ophthalmology,"** Gary Abrams, M.D., and Marvin Guter, M.D., of Miami.

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SECTION ON ORTHOPEDIC SURGERY
(SECTION III)
(Co-sponsored by Florida Orthopedic Society)
Saturday — 8:00 a.m. to 11:45 a.m.
H. Gerard Siek Jr., M.D., Clearwater
Program Chairman
**"Lysosymes and Ochonosis,"** Houshang Seradge, M.D., Tampa.
**"Acromioclavicular Joint Separation,"** Paul A. Lunseth, M.D., and Houshang Seradge, M.D., Tampa.
**"Long Term Follow-up of Treatment of Grade III Acromioclavicular Separation by Resection of the Distal Clavicle and Transfer of Coraco-Acromial Ligament,"** Edward F. Swan, M.D., Titusville.
**"Evaluation of Knee Injuries — A Practical Method,"** Fred Allman, M.D., Atlanta, Ga.
**"Harrington Instrumentation with Laminar Wiring,"** Harry L. Shufflebarger, M.D., Coral Gables.
**"When Should an Open Reduction be Done on a Fracture of an Os Calcis?"** Wallace E. Miller, M.D., Miami.
**"Scapular Fractures: A Review,"** James L. Cain, M.D., Vero Beach.
**"Treatment of Hip Fractures Using Single Type of Internal Fixation Device,"** Merlin G. Anderson, M.D., Clearwater.

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SECTION ON PEDIATRIC CARDIOLOGY
(Co-sponsored by Florida Association of Pediatric Cardiologists)
Saturday — 8:30 a.m. to 10:30 a.m.
Louis E. Cimino, M.D., Tampa
Program Chairman
**"Viral Myocarditis,"** George E. Birch, M.D.
**"Bacterial Endocarditis,"** Sanford T. Shulman, M.D., Gainesville.

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SECTION ON ALLERGY
(Co-sponsored by Florida Allergy Society)
Saturday — 8:30 a.m. to 12:45 p.m.
Robert H. Cohan, M.D., Pensacola
Program Chairman
**Introduction** — Robert H. Cohan, M.D., Program Chairman, Florida Allergy Society, Pensacola.
**"Differential Diagnosis and Treatment of Eczematous Dermatitis,"** Stanley I. Cullen, M.D., Associate Professor of Medicine, University of Florida College of Medicine, Gainesville.

**Pathophysiology of Asthma,"** Allan L. Goldman, M.D., Associate Professor of Medicine and Chief of Pulmonology, University of South Florida College of Medicine, Tampa.
**"Allergic Contact Dermatitis,"** Stanley I. Cullen, M.D., Gainesville.
**"Respiratory Insufficiency,"** Allan L. Goldman, M.D., Tampa.

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SECTION ON PHYSICAL MEDICINE AND REHABILITATION
(Co-sponsored by Florida Society of Physical Medicine and Rehabilitation)
Saturday — 10:00 a.m. to 12:00 noon
Hector A. Freytes, M.D., Miami
Program Chairman

**"International Rehabilitation,"** Sidney Licht, M.D., Past President, American Congress of Physical Medicine, Coral Gables.

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SECTION ON PEDIATRIC SURGERY
(Co-sponsored by Florida Association of Pediatric Surgeons)
Saturday — 8:00 a.m. to 12:00 noon
Burton H. Harris, M.D., Jacksonville
Program Chairman

**"Airway Management by Tracheostomy,"** Bradley M. Rodgers, M.D., and James L. Talbert, M.D., Gainesville.
**"Correction of Vaginal Atresia and Persistent Urogenital Sinus,"** Ashok Roychoudhury, M.B.BCh. (by invitation), H. Warner Webb, M.D., Albert H. Wilkinson Jr., M.D., and Burton H. Harris, M.D., Jacksonville.
**"Liver Tumors in Children,"** Farhat Moazam, M.D. (by invitation), Bradley M. Rodgers, M.D., and James L. Talbert, M.D., Gainesville.
**"Mycobacterial Lymphadenitis Revisited,"** Ashok Roychoudhury, M.B.BCh. (by invitation), Albert H. Wilkinson, Jr., M.D., H. Warner Webb, M.D., and Burton H. Harris, M.D., Jacksonville.
**"Hydrops of the Gallbladder in Children,"** Thomas Rumley, M.D. (by invitation), Farhat Moazam, M.D., James L. Talbert, M.D., and Bradley M. Rodgers, M.D., Gainesville.

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SECTION ON DERMATOLOGY
(Co-sponsored by Florida Society of Dermatology)
Saturday — 8:30 a.m. to 12:30 p.m.
Phillip Frost, M.D., Miami Beach
Program Chairman

**(Program to be Announced)**

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# Resolution of Grateful Recognition

*(**Editor's Note:** Mr. J. W. Herbert of Jacksonville retired this year after more than 30 years of service with Blue Shield of Florida, the last nine as President. The FMA Board of Governors, meeting in Miami on January 13, adopted the following resolution of "grateful recognition" for presentation to Mr. Herbert at the 1979 Annual Meeting).*

**Whereas,** J. W. (Jack) Herbert, of Jacksonville, Florida, has rendered outstanding and meaningful service to the medical profession and citizenry of the State of Florida since 1948; and

**Whereas,** this dedicated leader was born in Scranton, Pennsylvania, in June 1915; graduated from Scranton University in 1937; and

**Whereas,** this illustrious individual started his association in health care with the State of Pennsylvania as a Medical Social Service Representative, then enlisting in the United States Navy — after four years of which he was honorably discharged as a Lt. Commander — then returning to the health care field with Blue Cross of Chicago in 1945; becoming the Assistant Executive Director of Blue Cross and Blue Shield of Florida in 1948 and President of Blue Cross and Blue Shield of Florida in 1970; and has further served the community by having been on the Board of Directors of Blue Cross of Florida, Inc.; by being on the Board of Directors of Blue Shield of Florida, Inc., the Jacksonville Health Systems Agency, a member of the Florida Council of 100, the Knights of Columbus and the Civitan Club of Jacksonville; and in 1973 having been appointed by President Nixon as Metro Chairman of the National Alliance of Businessmen for the Jacksonville area, and likewise having served the nation as a member of the Board of Directors of the Blue Cross Association, as Chairman of the Board of Directors of Health Service, Inc., and as Chairman of the Inter-Plan Bank Committee, and

**Whereas,** the dynamic executive has overseen the growth of membership of Blue Cross and Blue Shield of Florida from 1,225,000 subscribers in 1970 to over 1,600,000 in 1978; therefore be it

**Resolved,** that a Certificate of Grateful Recognition be awarded to J. W. Herbert as a token of the warm appreciation that the officers, members and executive staff of the Association hold for the many years of distinguished service rendered by this outstanding individual.

# Dade County Medical Association Honors Dr. Jean Perdue

Jean Jones Perdue, M.D., longtime Dade County physician, was presented with the Dade County Medical Association's first annual Physicians Recognition Award on January 2, 1979.

Dr. Perdue of Miami Beach, has been practicing internal medicine and cardiology in Dade County since 1934. As Medical Director for the Dade County Department of Welfare during 1961 and 1962, she initiated a Home Care Program and supervised the medical and social care of patients placed in nursing homes, homes for the aged and boarding houses.

Beginning in 1961 and serving through 1973, she was the Medical Director of Jackson Memorial Hospital's Continuing Patient Care Division. From 1973 to 1977, Dr. Perdue acted as Director of Placement Services for Dade County. In 1977, she was made Medical Director of the Dade County Office of Health Services, a position she still holds.

Dr. Perdue holds professional memberships in 14 organizations and has been made an honorary member of even more. She serves on numerous medical advisory committees and her other activities are numerous.

Because of her many achievements, Dr. Perdue has received the Miami News' Outstanding Woman of 1964 and the Distinguished Service Award from the Florida Council on Aging (1973). She was named Doctor of the Year by the Dade County Medical Association Auxiliary in 1974, becoming the first woman to be selected for the award. The "Jean Jones Perdue Clinical Research Pavilion" was dedicated at the Miami Heart Institute in 1979.

The award (not to be confused with the American Medical Association's Physicians Recognition Award for participating in continuing medical education) was presented at the monthly meeting of the Dade County Medical Association by its president, Walter C. Jones III, M.D. Dr. Perdue was given an engraved silver tray and a standing ovation.

**Jean Jones Perdue, M.D., receives the Dade County Medical Association's First Annual Physicians Recognition Award from DCMA President Walter C. Jones III, M.D.**

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"Possibly" effective: as adjunctive therapy in the treatment of peptic ulcer and in the treatment of the irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

Final classification of the less-than-effective indications requires further investigation.

**Contraindications:** Glaucoma; prostatic hypertrophy, benign bladder neck obstruction; hypersensitivity to chlordiazepoxide HCl and/or clidinium Br.

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As with all anticholinergics, inhibition of lactation may occur.

**Precautions:** In elderly and debilitated, limit dosage to smallest effective amount to preclude ataxia, oversedation, confusion (no more than 2 capsules/day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider pharmacology of agents, particularly potentiating drugs such as MAO inhibitors, phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions reported in psychiatric patients. Employ usual precautions in treating anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship not established.

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Wellcome

Dr. McIntosh

**Charles B. McIntosh, M.D., of Jacksonville . . .** was elected to two major leadership positions in medicine in January.

First, members of the Duval County Medical Society tapped the veteran pediatrician as their President-Elect. Later in the month, he was elected President of the Florida State Board of Medical Examiners, on which he has served for several years.

Also elected to BME posts were Robert C. Palmer, M.D., of Pensacola, Vice President; and Thomas M. Brill, M.D., of Gainesville, Secretary.

A natiave of West Palm Beach, Dr. McIntosh attended Florida A & M University and New York University, receiving both B.A. and M.A. degrees. He received his M.D. degree from Meharry Medical College in Nashville, Tenn., in 1955.

Dr. McIntosh has been active in civic and professional activities in Jacksonville for many years.

**William N. Spellacy, M.D. . . .** has resigned the Chair of Obstetrics and Gynecology at the University of Florida College of Medicine to assume the same position at the University of Illinois College of Medicine, effective February 2.

Dr. Spellacy, a native of St. Paul, Minn., has been Professor and Chairman of the Department at Gainesville since 1974. Prior to that, he was on the faculties of the University of Miami School of Medicine and the University of Minnesota Medical School.

**The Florida Senate . . .** saluted the Florida Medical Association when it wound up the impeachment trial of Judge Samuel S. Smith of Lake City in Tallahassee on September 15.

The Senate adopted a resolution commending all the attorneys and praising Tallahassee Cardiologist John L. Wilson, M.D., for his advice in safeguarding the health of Judge Smith. The same resolution thanked the FMA and Tallahassee Memorial Hospital for "graciously (providing) the recommended equipment and assistance."

**Nine Florida physicians . . .** have been admitted to Fellowship in the American College of Cardiology. C. Richard Conti, M.D., of Gainesville, the College's Governor for Florida, identified the new Fellows as: Carlos E. Alosilla, M.D., David A. Chinoy, M.D., and Lawrence J. Kanter, M.D., of Jacksonville; Donald R. Eubanks, M.D., Clearwater; Alex J. Furst, M.D., Miami; Hugh M. Martin Jr., M.D., Tampa; Jack H. Pyhel, M.D., St. Petersburg; and John H. Selby Jr., M.D., and Wilmer W. Nichols, M.D., both of Gainesville.

**Philip J. Hodes, M.D., of Miami . . .** has received the gold medal of the Radiological Society of North America for outstanding contributions to radiology. Dr. Hodes is Professor of Radiology at the University of Miami School of Medicine.

**Donald V. Eitzman, M.D., of Gainesville . . .** has been elected Vice President and President-Elect of the Southern Perinatal Association. Dr. Eitzman is Professor of Pediatrics and Chief of the Division of Neonatology at the University of Florida College of Medicine.

# Book Reviews

**Book Review Editor**

**F. Norman Vickers, M.D.**

**Current Medical Diagnosis and Treatment: 1978** by Marcus A. Krupp, M.D. and Milton J. Chatton, M.D. (Eds.). 1,062 pages. Price $17.00. Lange Medical Publications, Los Altos, Calif., 1978.

Given the rapidity with which general medical knowledge has grown during the past few years, this widely read reference work is a mapped route to most of the accepted techniques currently utilized in medical diagnosis and treatment. Although intended to deal primarily with internal medicine disorders, the work has instructive chapters on oncology, genetics, poisons and immunology.

While the book is a compact source of researched information, it is not without its faults and *lacunae*. The thirty-two authors who collaborated on this seventeenth edition tend to use terminology which is at times vague and popular rather than exact and scientific (e.g., referring to the intestinal parasites by their scientific names followed by the popular name in parenthesis, but naming *N. americanus* infestations simply as "hookworm disease").

Other areas of deficiencies exist. The section on amebiasis recommends "a complete follow-up examination consists of study of 6 successive stools (at least 2 following a saline purge) . . . " Long experience with amebiasis has proved that saline purges in the intestinal ambiant makes parasitic identification difficult because of the damage to the parasitic membrane. In describing the treatment for American cutaneous and mucocutaneous Leishmaniasis, the paucity of information given is obvious. As a physician who treats 50 or more cases yearly, I must disagree with the statement that "antimony sodium gluconate, 600mg, IM or IV daily for 6 - 10 days" is sufficient treatment. The accepted treatment in this part of the upper Amazon Valley is 1.5gm. daily for 14 days, followed by a 14 day rest period and a second series of 1.5gm daily for 14 days. The package-inserts for European antimony sodium gluconate also recommend this treatment schedule.

Such deficiencies are probably explained by the infrequent contact United States physicians have with these diseases . . . which in turn uncovers an ever deeper deficiency. Although this book is available in six other languages, the authors do not take into account the international quality of both readers and diseases.

This volume is an useful adjunct to any busy physician's reference shelf. With more attention to the international medical community and its needs, the limitations of *Current Medical Diagnosis and Treatment 1978* will be reduced and diseases introduced into the United States by increasing world travel will be better explained to State-side physicians.

Thomas Brown, S.D.B., M.D.
Taisha, Equador

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Dr. Brown practices medicine in Taisha, Equador among the tribes in the upper Amazon Valley.

**People of the Lake, Mankind and Its Beginnings** by Richard E. Leakey and Roger Lewin. 298 Pages. Price $10.95. Anchor Press/Doubleday, Garden City, New York, 1978.

Scientists now feel that human like creatures have been present on the earth for three to four million years. Three decades ago when I was in college this figure was about a half million years. The first discoveries that led to this change were made by Louis and Mary Leakey, the paretns of the senior author of this book. Richard literally cut his eye teeth along the Great Rift Valley of East Africa where upheavals of the earth's crust and erosion have exposed the remains of our ancestors. Richard learned paleoanthropology on location from his parents and has made notable discoveries in his own right. In this volume, speaking through the fluent pen of science writer, Roger Lewin, he tells us of the excitement and significance of these finds. Last year these authors presented much the same material in a volume entitled *Origins*. The present volume fares badly in comparison with the craftsmanship and illustrations of *Origins* but then it is $7.00 cheaper.

Not being trained in anthropology, much less paleoanthropology, I am not in a position to criticize the textual material of *People of the Lake*, but I get the uneasy feeling that unwarranted and sweeping deductions have been made from very meager information. Despite this criticism the book will be of engaging interest to parlor anthropologists who have not already read *Origins*.

William M. Straight, M.D.
Miami

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Dr. Straight is in private practice of Internal Medicine in Miami and also Historical Editor for the FMA Journal.

# Books Received

**Receipt of the following books is acknowledged. Medical readers interested in reviewing particular books are invited to address requests to the Book Review Editor. Following acceptance of a written review for publication, a reviewer may then retain the book reviewed for his personal or favorite library.**

**Pharmacological and Toxicological Perspectives of Commonly Abused Drugs** by Darryl Inaba, Ph.D., E. Leong Way, Ph.D., Kenneth Blum, Ph.D. and Sidney H. Schnoll, M.D. 44 Pages. National Drug Abuse Center, Rosslyn, Virginia, 1978.

**Currents in Alcoholism, Biological, Biochemical, and Clinical Studies**, Edited by Frank A. Seixas, M.D. 601 Pages. Illustrated. Price $31.50. Grune & Stratton, Inc., New York, 1978.

**Controlling the Use of Therapeutic Drugs: An International Comparison** edited by William M. Wardell. 263 Pages. American Enterprise Institute for Public Policy Research, 1978.

**Directory of Pathology, Training Programs 1979-80** by the Intersociety Committee on Pathology Information, Inc. 470 Pages. Illustrated. Price $25.00. Geo. W. King, Co., Baltimore, 1978.

**Wholistic Dimensions in Healing, A Resource Guide** by Leslie J. Kaslof. 295 Pages. Illustrated. Price $7.95. Doubleday & Company, Inc., Garden City, New York, 1978.

**Culture and Comment, The New Relationships Between the Generations in the 1970's** by Margaret Mead. 177 Pages. Price $2.95. Anchor Press/Doubleday, Garden City, New York, 1978.

**Uses of Enzymes and Immobilized Enzymes** by Francis X. Hasselberger. 220 Pages. Price $14.95. Nelson-Hall Publishers, Chicago, 1978.

**Between You and Me** by John A. Parrish, M.D., Barbara A. Gilchrest, M.D. and Thomas B. Fitzpatrick, M.D. 239 Pages. Price $8.95. Little, Brown and Company, Boston, 1978.

**Atlas of Dermatology** by Gernot Rassner, M.D. 200 Pages. 201 Full color illustrations. Price $24. Urban & Schwarzenberg, Baltimore, 1978.

**The Chemistry of Human Behavior** by Herbert L. Meltzer, Ph.D. 261 Pages. Illustrated. Price $17.95 (cloth). Nelson-Hall Publishers, Chicago, 1979.

**Office Techniques for Diagnosing Skin Disease** by William H. Eaglstein, M.D. and David M. Pariser, M.D. 194 Pages. Illustrated by Carroll H. Weiss, RBP. Price $23.95. Year Book Medical Publishers, Chicago, 1978.

**The Brand-Name Carbo Calorie Diet** by Donald S. Mart. 367 Pages. Price $9.95. Doubleday & Company, Inc., Garden City, New York, 1979.

## INFORMATION FOR AUTHORS

Manuscripts should be submitted to the Editor of the Journal, Florida Medical Association, P.O. Box 2411, Jacksonville, Florida 32203, in original and one duplicate copy. Copy should be typewritten and double spaced.

**Author Responsibility.** The author is responsible for all statements made in his work, including changes made by copy editor. Manuscripts are received with the understanding that they are not simultaneously under consideration by any other publication. Rejected manuscripts are returned to the author. Accepted manuscripts become the property of the Journal and may not be published elsewhere without permission from the author and the Journal.

Each of the following should begin on a new page: synopsis-abstract, first page of text, legends for illustrations, tables and acknowledgments. Each page should include a running head and surname of senior author.

**Synopsis-Abstract.** All manuscripts should include a 150 word, maximum length, synopsis-abstract which is a factual (not descriptive) summary of the work. This replaces the summary and precedes your article.

Title should be short, specific, clear and amenable to indexing.

List affiliations for each author. If author's present affiliation is different from affiliation under which the work is done, both should be given.

**References.** The following minimum data should be given: names of all authors, complete title of article cited, name of journal abbreviated according to **Index Medicus**, volume number, page numbers and year of publication. All references must be cited in text and should be arranged according to order of citation and numbered consecutively. If references are too numerous, we reserve the right to eliminate with notation: References are available from the author(s) upon request.

All accepted manuscripts are subject to copy editing. Authors receive a galley proof for approval before publication. No changes are accepted after galley is returned. Forms for ordering reprints are included with the galley proofs.

**Illustrations.** Illustrations are all material which cannot be set in type such as photographs, line drawings, graphs, charts and tracings. The entire cost of reproducing color illustrations is the responsibility of the author(s). Omit all illustrations which fail to increase understanding of text. Drawings and graphs should be done with India ink on white paper. Select overall proportions appropriate for material presented and sufficient for reduction, if necessary. Each illustration should be numbered and cited in the text. Legends should be typed, double-spaced on separate sheet of paper. The following information should be typed on an adhesive strip and affixed to back of illustration: figure number, title of manuscript, name of author and arrow indicating top. Tables should be self-explanatory and should supplement, not duplicate, the text. Number tables consecutively, beginning with 1. Each table must have a title.

**Permission letters** must accompany patient photos whenever there is a possibility of identification. Prepare in accordance with state laws and specify authority to publish.

**Letters submitted** for publications should be designated "For Publication."

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## MARK THESE DATES

## ON YOUR CALENDAR . . .

## MAY 23-27, 1979

## 105TH ANNUAL MEETING

## FLORIDA MEDICAL ASSOCIATION, INC.

## DIPLOMAT HOTEL

## HOLLYWOOD-BY-THE-SEA


BRIEF SUMMARY OF
PRESCRIBING INFORMATION

**ANTIMINTH®** (pyrantel pamoate)
**ORAL SUSPENSION**

**Actions.** Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13 μg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

**Indications.** For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

**Warnings.** *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

**Precautions:** Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

**Adverse Reactions.** The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

**Dosage and Administration.** *Children and Adults:* Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful=5 ml.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

**How Supplied.** Antiminth Oral Suspension is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg pyrantel base per ml, supplied in 60 ml bottles and Unitcups™ of 5 ml in packages of 12.

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ORAL SUSPENSION

a drug of choice in pinworm infections

Please see brief summary of prescribing information on facing page.

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# A reminder

# ZYLOPRIM®

## (allopurinol)

100 and 300 mg scored Tablets

- inhibits uric acid formation
- helps prevent urate crystal depositions in synovia
- reduces risk of uric acid lithiasis

**INDICATIONS AND USE: This is not an innocuous drug and strict attention should be given to the indications for its use. Pending further investigation, its use in other hyperuricemic states is not indicated at this time.**

Zyloprim® (allopurinol) is intended for:

1. treatment of gout, either primary, or secondary to the hyperuricemia associated with blood dyscrasias and their therapy;
2. treatment of primary or secondary uric acid nephropathy, with or without accompanying symptoms of gout;
3. treatment of patients with recurrent uric acid stone formation;
4. prophylactic treatment to prevent tissue urate deposition, renal calculi, or uric acid nephropathy in patients with leukemias, lymphomas and malignancies who are receiving cancer chemotherapy with its resultant elevating effect on serum uric acid levels.

**CONTRAINDICATIONS:** Use in children with the exception of those with hyperuricemia secondary to malignancy. The drug should not be employed in nursing mothers.

**Patients who have developed a severe reaction to Zyloprim should not be restarted on the drug.**

**WARNINGS:** ZYLOPRIM SHOULD BE DISCONTINUED AT THE FIRST APPEARANCE OF SKIN RASH OR ANY SIGN OF ADVERSE REACTION. In some instances a skin rash may be followed by more severe hypersensitivity reactions such as exfoliative, urticarial and purpuric lesions as well as Stevens-Johnson syndrome (erythema multiforme) and very rarely a generalized vasculitis which may lead to irreversible hepatotoxicity and death.

A few cases of reversible clinical hepatotoxicity have been noted and in some patients asymptomatic rises in serum alkaline phosphatase or serum transaminase have been observed. Accordingly, periodic liver function tests should be performed during the early stages of therapy, particularly in patients with pre-existing liver disease

Patients should be alerted to the need for due precautions when engaging in activities where alertness is mandatory.

Nevertheless, iron salts should not be given simultaneously with Zyloprim. This drug should not be administered to immediate relatives of patients with idiopathic hemochromatosis.

**In patients receiving Purinethol® (mercaptopurine) or Imuran® (azathioprine), the concomitant administration of 300-600 mg of Zyloprim per day will require a reduction in dose to approximately one-third to one-fourth of the usual dose of mercaptopurine or azathioprine. Subsequent adjustment of doses of Purinethol or Imuran should be made on the basis of therapeutic response and any toxic effects.**

*Usage in Pregnancy and Women of Childbearing Age:* Zyloprim® (allopurinol) should be used in pregnant women or women of childbearing age only if the potential benefits to the patient are weighed against the possible risk to the fetus.

**PRECAUTIONS:** Some investigators have reported an increase in acute attacks of gout during the early stages of allopurinol administration, even when normal or subnormal serum uric acid levels have been attained.

It has been reported that allopurinol prolongs the half-life of the anticoagulant, dicumarol. This interaction should be kept in mind when allopurinol is given to patients already on anticoagulant therapy, and the coagulation time should be reassessed.

A fluid intake sufficient to yield a daily urinary output of at least 2 liters and the maintenance of a neutral or, preferably, slightly alkaline urine are desirable to (1) avoid the theoretic possibility of formation of xanthine calculi under the influence of Zyloprim therapy and (2) help prevent renal precipitation of urates in patients receiving concomitant uricosuric agents.

Patients with impaired renal function require less drug and should be carefully observed during the early stages of Zyloprim administration and the drug withdrawn if increased abnormalities in renal function appear.

In patients with severely impaired renal function, or decreased urate clearance, the half-life of oxipurinol in the plasma is greatly prolonged. Therefore, a dose of 100 mg per day or 300 mg twice a week, or perhaps less, may be sufficient to maintain adequate xanthine oxidase inhibition to reduce serum urate levels. Such patients should be treated with the lowest effective dose, in order to minimize side effects.

Mild reticulocytosis has appeared in some patients.

As with all new agents, periodic determination of liver and kidney function and complete blood counts should be performed especially during the first few months of therapy.

**ADVERSE REACTIONS:**

*Dermatologic:* Because in some instances skin rash has been followed by severe hypersensitivity reactions, it is recommended that therapy be discontinued at the first sign of rash or other adverse reaction (see WARNINGS). Skin rash, usually maculopapular, is the adverse reaction most commonly reported.
Exfoliative, urticarial and purpuric lesions, Stevens-Johnson syndrome (erythema multiforme) and toxic epidermal necrolysis have also been reported.
A few cases of alopecia with and without accompanying dermatitis have been reported.
In some patients with a rash, restarting Zyloprim (allopurinol) therapy at lower doses has been accomplished without untoward incident.

*Gastrointestinal:* Nausea, vomiting, diarrhea, and intermittent abdominal pain have been reported.

*Vascular:* There have been rare instances of a generalized hypersensitivity vasculitis or necrotizing angiitis which have led to irreversible hepatotoxicity and death.

*Hematopoietic:* Agranulocytosis, anemia, aplastic anemia, bone marrow depression, leukopenia, pancytopenia and thrombocytopenia have been reported in patients, most of whom received concomitant drugs with potential for causing these reactions. Zyloprim® (allopurinol) has been neither implicated nor excluded as a cause of these reactions.

*Neurologic:* There have been a few reports of peripheral neuritis occurring while patients were taking Zyloprim. Drowsiness has also been reported in a few patients.

*Ophthalmic:* There have been a few reports of cataracts found in patients receiving Zyloprim. It is not known if the cataracts predated the Zyloprim therapy. "Toxic" cataracts were reported in one patient who also received an anti-inflammatory agent; again, the time of onset is unknown. In a group of patients followed by Gutman and Yü for up to five years on Zyloprim therapy, no evidence of ophthalmologic effect attributable to Zyloprim was reported.

*Drug Idiosyncrasy:* Symptoms suggestive of drug idiosyncrasy have been reported in a few patients. This was characterized by fever, chills, leukopenia or leukocytosis, eosinophilia, arthralgias, skin rash, pruritus, nausea and vomiting.

**OVERDOSAGE:** Massive overdosing, or acute poisoning, by Zyloprim has not been reported.

**HOW SUPPLIED:** 100 mg (white) scored tablets, bottles of 100 and 1000; 300 mg (peach) scored tablets, bottles of 30, 100 and 500. Unit dose packs for each strength also available.

*Complete information available from your local B. W. Co. Representative or from Professional Services Department PML.*

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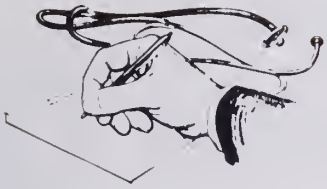

# Others Are Saying

## The Origin of the Caduceus

**Joel Mattison, M.D.**

On the front of our building at 606 South Boulevard hangs a yard-long steel emblem which is sometimes referred to (rightly or wrongly) as a caduceus.

The origin of the caduceus is said to have been lost somehow in antiquity; it seems on the contrary that there are too many explanations of its origin.

1. In Greek mythology, one finds reference to the staff of Hermes, the messenger of the gods. Referred to as Mercury by the Romans, he was the son of Jupiter, but it was Apollo who gave to him a magic wand which was used to guide the souls of the dead to the lower world. With this staff, one could control the living or the dead and even turn objects into gold. This emblem consisted of a staff with two wings at its upper extremity and with a pair of snakes entwined about it. This is the emblem used by the United States Medical Corps, by chiropractic, and sometimes by physicians.

2. Asclepios (Aesculapius), son of Apollo, was the god of medicine. Zeus, fearful that he might render all men immortal slew him with a thunderbolt. He is shown in effigy as carrying a sticklike wand with a serpent coiled around it. This single-snaked wingless staff is probably to be regarded as the only true symbol of medicine as a profession. Its origin may be speculated upon: The serpent, on the one hand, was regarded as extremely wise and would appropriately have been selected and combined with the staff as a symbol of authority. On the other hand, there are those who feel that the creature on the staff is not a serpent at all but rather a **Dracunculus medinensis** or guinea worm which was removed by experienced physicians by winding it slowly and painstakingly over a stick, thus removing it over an extended period of time since too aggressive removal would snap the worm, releasing its toxin and resulting in a shocklike syndrome (perhaps anaphylactoid) and sometimes even death.

3. In Numbers 21:6-9, we read: "And the Lord sent fiery serpents among the people, and they bit the people; and much of the people of Israel died . . . And the Lord said unto Moses, make thee a fiery serpent, and set it upon a pole; and it shall come to pass, that everyone that is bitten, when he looketh upon it, shall live. And Moses made a serpent of brass, and put it upon a pole, and it came to pass, that if a serpent had bitten any man, when he beheld the serpent of brass, he lived." Was this not indeed a familiar symbol, the snake upon the pole which it was life and health to look upon.

4. In the Republic of Gabon in West Africa, I was quite surprised to find a fetisher's (witch doctor's) staff, consisting of a cane in the form of a snake combined with a stick with stripe-like coils about its length — an undeniable type of the same symbol with all essential elements present.

Whatever its original source, this symbol stands today as our authority, with perhaps greater power than those of us who carry it sometimes believe. In each of the above given examples, there is a common tradition that it is divinely given and that those who bear it must at times act with a wisdom that is superhuman. Our symbol is not that of the messenger, swift as light, but that of the healer or comforter, whether it dates to Moses, Asclepius, or whomever.

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Reprinted from The President's Page of The Bulletin of the Hillsborough County Medical Association, December 1978.

# Physicians and Inflation

**Edward W. St. Mary, M.D.**

Since 1970, the earnings of physicians in the United States have *not* kept pace with the increase in the cost of living, a study published by the Law and Economic Center of the University of Miami School of Law, differs sharply with yet another biased and untrue report published this year by the President's Council of Wage and Price Stability.

The study, written by Professor Keith Leffler, an economist on the faculty of the University of Washington, Seattle, concluded "that the allegations of the Council's report are unsupported by logical analysis or empirical fact."

What is more alarming is the continuous and malicious round robin attacks on the physicians and the health care sector perpetuated, almost on cue, by government agencies.

The familiar scenario constitutes major errors in data analysis, logic and philosophy. The news media, accomplices or not, have publicized and reprinted these errors to the extent we are constantly called upon to defend ourselves rather than create a positive image. When these misleading statements are made and published, it matters not that they may be refuted and proven wrong. The damage has been crudely, yet effectively, done; and another attack is launched at a different angle — again on cue from yet another bureau release.

We physicians know full well that inflation is here. We, too, are its victims. More so since we buy goods and salaries which cost more than services we provide. We also know the only substantial cause of fee increases is the introduction of the Medicare and Medicaid programs. It started there. As the Miami report concludes, the real story behind the report may well be "that the extension of such programs into a full blown national health insurance program can only lead to further increases in the cost of medical care, with no imaginable improvements in the quality or availability."

The purchasing power of the dollar in 1970 was 35 percent of what it was in 1939 — and only 21 percent in 1978. This means one fifth the purchasing power of the dollar compared to 1939.

If fees have gone up, inflation has gone even further. Inflation has generally outrun physician fees in the cost of living index. The figures become even more diverse when the 1977 CPI data showed fees rising a projected annual rate of 9.6 percent and the cost of living at 9.7 percent. Moreover, the fee boost was offset by an overall *decline* in patient visit rates.

The bottom line is the cost of living rose 6.8 percent yet physicians earnings grew only 4.2%. This is well below the CPI alluded to previously.

Even though the public's cynicism against physicians' earning is fueled by these slanted slaps, the fact remains the public has a far greater antipathy against the politicians and the waste of taxpayer's money which the politicians themselves regulate and dispense.

When physicians' fees, accountable for 18 percent of the health care dollar, are put in a proper perspective, there seems to be little need for this kind of peanut style emotional populism unless a more sinister motivation is behind the reports.

It is imponderable to see how the government can expect physicians' support for its national health insurance plans while at the same time alienating these same physicians by accusing them of being selfishly preoccupied with their own bank accounts.

When the medical sector is so attacked concerning fees, one then has to consider the plain distinctive motivation behind the attacks. First, sabotage the present excellent medical system. Second, convince the voter he may get something better for nothing, such as an elaborate national health plan.

Tell this reasoning to the middle class voter, making $17,000 a year or higher, who takes home half of the income of the country, yet pays more than 70 percent of all personal income taxes.

It all seems to be an ill planned scheme for further government intervention in medicine to control costs.

A history lesson is involved in this schizophrenic thinking. Since when has government involvement ever reduced the cost of anything?

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Reprinted from the Editorial section of Miami Medicine, November 1978.

# FMA AUXILIARY

## Doctor's Day

**Elizabeth Carpenter (Mrs. N.H.)**

On March 30th, "Doctor's Day" again will be observed by the Southern Medical Association. It commemorates the first use of ether as an anesthetic in surgery, and the medical auxiliaries in the South plan various ways to celebrate the date. As "Doctor's Day" draws near this year we find our thoughts unsettled due to the public furor about medicine, and perhaps it's a good time for the medical community to look about and recognize just what is going on.

First of all, physicians themselves haven't changed. They still go out every day to practice medicine the very best they can, and that means they deliver the best medical care in the world. And yet, the public view of the doctor has gone from adulation to an almost open hostility in the last few years. What has happened to cause such a change of public opinion in so short a time? One hears "Doctor's Fees" quite often, but that is far too simple an answer which doesn't even touch a few basic truths the public, the media, and physicians themselves should recognize.

We hear much about the right to good, low-cost medical care. That's like mother-love. No one is against it, but somehow the right to good care gets translated in the public mind into the right to perfect health or the right to a perfect result from treatment. Unfortunately, no one has that right. Some people will get sick and some will die, regardless of care. It's God, it's life, it's heredity, but it is not the physician or his care that basically determines health and people must recognize this fact.

The second part of the political catch-phrase is "low cost." In this area the facts may not be as easy to recognize, but they're still there and operating. Physicians like to think of themselves as professionals but the cold, hard fact is that health care is an industry, and an enormous one. In fact, delivering health care is now the third largest industry in the United States. Millions of people earn their living in the health field, not just a few doctors. Certainly physicians are well paid as are the top executives in any field, but the vast bulk of the health dollar goes as in any industry to maintaining plants, equipment and personnel. When buying an automobile people realize they are paying for production lines and wages, but very few seem to recognize that their money goes for the same in health care. The better the product the more it costs in either instance, and it is quite imperative that the public comes to realize this situation because if, or when, the government starts to regulate health care it will affect millions of people, not just a few doctors.

Perhaps the most important point with which the public must come to grips is the indisputable fact that aging is a very expensive process. Ask your local beauty. Every year it costs more and takes more time, even without health problems. With the advances in medicine people now live longer. But like anything else, the longer one keeps it the more it costs to keep it going because parts wear out. This is just as true of bodies as it is of vacuum cleaners. Extra years are now the norm, and it would seem life should be prized above rubies, yet, tragically, such does not seem to be the case for physicians probably receive the most severe criticism of all over their care of the old. How ironic to be cursed for what should be the greatest achievement of all — the gift of life.

These are sobering thoughts to bring to "Doctor's Day," but they reflect no real concern for physicians. Doctors always have been, and always will be special people. Their courage, responsibility and sense of duty will continue to set them apart long after catch phrases, youth cultures and government regulations have faded away. When today's last angry man comes to his chance for extra years, he'll grab it with both hands, whatever the cost. And medicine will be there to provide it.

---

Mrs. Carpenter is Chairman, Doctor's Day, BCMA Auxiliary, Central Branch, Fort Lauderdale.

# MEETINGS

## Approved by the FMA Committee on Continuing Medical Education

### APRIL

**(Family Practice Review Year 11,** Mar. 31-June 24, Tampa+)

**Seventh Annual Postgraduate Seminar in Emergency Medicine,** Apr. 2-5, Sheraton Twin Towers, Orlando. For information: Registrar, FACEP, 600 Courtland Street, Suite 420, Orlando 32804.

**Cirrhosis & Portal Hypertension: Recent Advances in Diagnosis and Therapy,** Apr. 5, Tampa.+

**Tutorial Courses of Instruction in Coronary Care for the Practicing Physician,** Apr. 9-14, Jackson Memorial Hospital, Miami.*

**Diagnostic Therapeutics XV, Cancer Symposium,** Apr. 13-14, Hilton Inn, Fort Lauderdale. For information: Dr. de Almeida, 4330 West Broward Blvd., Suite H., Fort Lauderdale 33317.

**Laparoscopy Course,** Apr. 23-24, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th Street, Jacksonville 32209.

**Myocardial Infarction and Other Ischemic Heart Syndromes,** Apr. 25-28, Innisbrook Resort, Tarpon Springs.**

**Fourth Annual Seminar, Fla. Soc. Rheumatology; Fourteenth Postgraduate Seminar, N.E. Fla. Div. Arthritis Foundation,** Apr. 26-28, Sheraton Hotel, Jacksonville Beach. For information: Louis M. Sales, M.D., 2522 Oak St., Jacksonville 32204.

**The Impact of Basic Research Today on Clinical Medicine Tomorrow,** Apr. 26-29, Sarasota. For information: Charles R. Estill, 1865 Hawthorne Street, Sarasota 33579.

**Sarasota Medical Awards Conference,** Apr. 26-29, Hyatt House, Sarasota. For information: S. P. Bralow, M.D., 1515 South Osprey Ave., Sarasota 33579.

**Seventh Annual Surgical Intensive Care Symposium,** Apr. 27-30 (location to be announced).*

**Tutorial Courses of Instruction in Coronary Care for the Practicing Physician,** Apr. 30-May 5, Jackson Memorial Hospital, Miami.*

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***For information: Contact Division of Continuing Medical Education, D23-3, University of Miami School of Medicine, P.O. Box 016960, Miami 33101. Tel. (305) 547-6716.**

****For information: Contact Division of Continuing Education, Box J-233, J. Hillis Miller Health Center, Gainesville 32610. Tel. (904) 392-3143, or 392-3183.**

**+For information: Contact Janifer M. Judisch, M.D., CME, University of South Florida, Tampa 33620. Tel. (813) 974-2074.**

### MAY

**7th Annual Intensive Care Symposium,** May 4-7, Eden Roc Hotel, Miami Beach.*

**Ultrasound (General) In-Service Workshop,** May 7-11, Jackson Memorial Hospital, Miami.**

**29th Annual Postgraduate Seminar — "Horizons in Medicine",** May 10-11, Wolfson Auditorium, Mount Sinai Medical Center of Greater Miami, Miami Beach. For information: Mount Sinai Medical Center, 4300 Alton Road, Miami Beach 33140.

**Update on New Medications,** May 12, Medical Center Clinic, Pensacola. For information: West Florida Regional Medical Center, 8355 North Davis Highway, Pensacola 32504.

**Detection and Colposcopy & Update in Gynecologic Oncology,** May 13-19, Royal Biscayne Beach Hotel and Racquet Club, Key Biscayne.*

**9th Family Practice Review,** May 16-19, Gainesville Hilton, Gainesville.**

**Laparoscopy Course,** May 28-29, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th Street, Jacksonville 32209.

### JUNE

**Master Approach to Cardiovascular Problems — 7th Annual Conference,** June 8-10, The Contemporary Hotel, Lake Buena Vista.*

**Florida Suncoast Pediatric Conference,** June 10-13, Sheraton Sand Key Hotel, Clearwater. For information: Donald Macdonald, M.D., 1510 Barry St., Suite C, Clearwater 33516.

**Laparoscopy Course,** June 25-26, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th Street, Jacksonville 32209.

### JULY

**Coronary Disease, Exercise Testing, and Cardiac Rehabilitation,** July 13-15, Royal Plaza Hotel, Orlando. For information: Mr. Stephen E. Mattingly, IMEC, 64 Inverness Drive East, Englewood, Colorado 80112.

**Laparoscopy Course,** July 30-31, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th Street, Jacksonville 32209.

### AUGUST

**ECG Interpretation & Arrhythmia Management,** Aug. 17-19, Orlando Hyatt, Orlando. For information: William E. James, Ph.D., 64 Inverness Dr., E., Englewood, Colorado 80112.

**Laparoscopy Course,** Aug. 27-28, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th St., Jacksonville 32209.

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**Physicians Wanted**

## FAMILY PRACTITIONERS

GENERAL PRACTITIONER: For well equipped medical clinic immediately adjacent to 120 bed skilled nursing facility; would also act as medical director for nursing home. Salary 100% of intake. Contact: Administrator, Wakulla Manor Nursing Home, P.O. Box 508, Crawfordville, Florida 32327. Phone: (904) 926-7181.

FAMILY PRACTITIONER. Growing community in northeast Florida offers immediate opportunity to establish private practice. Excellent schools, beautiful beaches, year-round outdoor recreation. Contact: Claude Weeks, Executive Director, Flagler Hospital, P.O. Box 100, St. Augustine, Florida 32084. Phone: (904) 824-8411.

FAMILY PRACTITIONER OR INTERNIST wanted to share facilities with three practitioners in solo practice. Major equipment provided. Rent $250 per month. Competent laboratory and x-ray departments with income based on use. Bookkeeping system and receptionist shared. Contact: T. C. Kenaston Jr., M.D., P.O. Box 550, Cocoa, Florida 32922.

LAKE BUTLER, Union County, northern central Florida. Immediate opening for General Practitioner. A financial guarantee with free office rent in new doctor's professional building next to new modern hospital. Community supported recruitment. Florida licensure required. For more information, contact Mr. Gary L. Keach, Administrator (904) 496-2323.

## SPECIALISTS

EXCELLENT OPPORTUNITY for Board Certified Urologist; needed for fast growing town in coastal southwest Florida. Write C-885, P.O. Box 2411, Jacksonville, Florida 32203.

CENTRAL FLORIDA MULTISPECIALTY CLINIC HAS OPENING for second general surgeon. Good financial opportunity; new well equipped office near three hospitals. Write C-893, P.O. Box 2411, Jacksonville, Florida 32203.

SEEKING PHYSICIANS TO RELOCATE TO MARIANNA, FLORIDA, trade area of 40,000 people. Professional study and medical staff supports the recruitment of an OB-GYN, Urologist, Orthopedist, Internal Medicine to supplement the 12 already here. New 90-bed hospital now under construction. Ideal small town living conditions. Financial and business assistance available to qualified physicians. Phone: (904) 526-2200 — Elwin O'Steen.

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PSYCHIATRIST. IMMEDIATE OPENING. Full-time private solo practice, or may affiliate part-time with Tri-County Mental Health Association. Contact: Claude Weeks, Executive Director, Flagler Hospital, P.O. Box 100, St. Augustine, Florida 32084. Phone: (904) 824-8411.

WEST PALM BEACH: Solo practitioner Internist seeking Internist, board eligible or certified. Subspecialty in Cardiology preferred. Write C-907, P.O. Box 2411, Jacksonville, Florida 32203.

NEUROLOGIST NEEDED by twenty man multispecialty group located in beautiful Northwest Florida beach community. Guaranteed compensation with incentive leading to partnership. No investment required. New clinic building located adjacent to near-new 235-bed hospital. Contact: Theodore E. Rahe, Administrator, White-Wilson Medical Center, Fort Walton Beach, Florida 32548. Phone: (904) 863-4121.

ORTHOPEDIST — Excellent opportunity for the right man in twenty physician multispecialty group in beautiful Northwest Florida beach community. Immediate incentive compensation plan with guarantee leading to full partnership. No investment required. Ideal practice setting in new building located directly across the street from new modern hospital. Contact: Theodore D. Rahe, Administrator, White-Wilson Medical Center, Fort Walton Beach, Florida 32548. Phone: (904) 863-4121.

GENETIC ASSOCIATE to work in university-based regional genetics program. Clinical, research and educational responsibilities. Salary commensurate with experience. Send curriculum vitae and three letters of reference to Sherry E. Wallace, M.S., Chairman, Search Committee, Division of Genetics, Box J-296, Dept. of Pediatrics, University of Florida, Gainesville, Florida 32610. An Affirmative Action-Equal Opportunity Employer.

RESEARCH ASSOCIATE. Master's or Ph.D. in biochemistry or medical genetics to work in biochemical genetics lab. Duties include research in trace metal metabolism and supervision of diagnostic metabolism lab. Salary commensurate with qualifications and experience. Submit curriculum vitae and three letters of recommendation to Adolfo D. Garnica, M.D., Div. of Genetics, Box J-296, Dept. of Pediatrics, University of Florida, Gainesville, Florida 32610. An Affirmative Action-Equal Opportunity Employer.

INTERNIST — CARDIOLOGIST: Two man practice seeks badly needed associate with immediate availability possible. Excellent opportunity in well-established Internal Medicine, noninvasive Cardiology practice. Write C-904, P.O. Box 2411, Jacksonville, Florida 32203.

MISCELLANEOUS

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PHYSICIANS NEEDED FOR NEW multispecialty medical center in Delray Beach, Florida. Primary care and specialty physicians, full or part time. Write P.O. Box 23606, Fort Lauderdale, Florida 33334.

POSITIONS IN ALL SPECIALTIES NEEDED for new medical center to be built about September around the corner from Top Of The World condominium, Clearwater, Florida. Population 25,000 within a mile. Contact A. Touchette, 2380 World Parkway Boulevard, Clearwater, Florida 33515. Phone (813) 733-7752.

**Situations Wanted**

SITUATION WANTED: 37 year old, Board Certified, OB-GYN specialist, subspecialty Boards in perinatology, seeks solo or group practice. Write C-899, P.O. Box 2411, Jacksonville, Florida 32203.

FAMILY PRACTITIONER, 31, board eligible, seeks group, associate, partnership or solo in southern Florida. Available February 1st. Florida license applied for. Please reply: 19781 Futura Drive, Yorba Linda, California 92686.

ORTHOPAEDIC SURGEON — Young, American, university trained, board certified, with military obligation satisfied. Experienced in trauma, joint replacement, arthroscopy, etc. Write C-910, P.O. Box 2411, Jacksonville, Florida 32203.

POSITION WANTED: Director of Medical Affairs/similarly related administrative post. Fully accredited general surgeon with extensive medical staff and Board of Trustee administrative experience. Write C-915, P.O. Box 2411, Jacksonville, Florida 32203.

AMERICAN TRAINED INTERNIST looking for association and eventual partnership with other board eligible/certified internists. Available summer of 1979. Write to Dr. Steven Cohen, 80-35 Springfield Blvd., Queens Village, New York 11427.

PULMONARY PHYSICIAN, board certified in Internal Medicine, 30 years, available from July '79. Experienced in ICU, fiberoptic bronchoscopy and pulmonary laboratory. Seeks solo, hospital-based or group practice. Write C-919, P.O. Box 2411, Jacksonville, Florida 32203.

A BOARD ELIGIBLE INTERNIST looking for a position in Florida. Solo, group or hospital-based practice. Available at any time. Contact (216) 473-0728 or write C-920, P.O. Box 2411, Jacksonville, Florida 32203.

SITUATION WANTED: NEUROLOGIST with special competence in Child Neurology, seeking solo or group practice in Florida. Married, age 36. Contact: Leon L. Tan, M.D., 1515 Pennsylvania Ave., 11 F, Brooklyn, New York 11239. Phone (212) 642-3757.

RHEUMATOLOGIST, INTERNIST ABIM, certified in rheumatology. Florida license. Seeks practice, partnership or group, South Florida. Currently full time directing residency program in university hospital. Will consider similar academic position. Write C-913, P.O. Box 2411, Jacksonville, Florida 32203.

HUSBAND (INTERNIST/CARDIOLOGIST: ABIM CV ELIGIBLE). WIFE (PSYCHIATRIST) wish to relocate in East or West coast of Florida. Practice, partnership or hospital position. Available July '79. Call (212) 653-3000, Ext. 414.

UNIVERSITY TRAINED GENERAL SURGEON, 33, board eligible, seeks position, group or associate. Michael Lane, M.D., 7901 Henry Avenue, Philadelphia, Pa. 19128. Phone: (215) 483-2426.

GENERAL PRACTITIONER, 39, Florida licensed, wide practice experience, seeks salaried or guaranteed income position in South or Central Florida. J. Roger Demosthenes, M.D., P.O. Box 1438, Florence, Arizona 85232. Phone (602) 723-3805 evenings.

THIRTY THREE YEAR OLD BOARD CERTIFIED INTERNIST seeks association with internal medicine group in Miami area. University hospital trained in solo practice for five years in internal medicine in Northeast. Contact (305) 255-3026.

36 YEARS OLD, BOARD CERTIFIED GENERAL SURGEON, Florida licensed, looking for group, hospital-based, partnership. Contact: Jorge A. Melendez, M.D., F.A.C.S., 2114 S. Cortez, Tampa, Florida 33609. Phone: (813) 879-3978.

INTERNAL MEDICINE — available July. American graduate, Christian. Practice in a small or medium-sized town. Contact 9310 Fountainbleau Blvd., #510, Miami, Florida 33172.

ANESTHESIOLOGIST, board eligible wishes to join group. Available after June 1979. Contact Dr. Dagdayan, 30 Prospect Ave., #48, Hackensack, New Jersey 07601. Phone (210) 342-2429.

PULMONOLOGIST: ABIM and Pulmonary Board certified. Experienced in all aspects of Pulmonary Medicine including fiberoptic bronchoscopy and intensive care. Seeks solo, group or hospital-based practice in Florida. Will do Internal Medicine. Available immediately. Reply C-918, P.O. Box 2411, Jacksonville, Florida 32203.

**Practices Available**

GENERAL AND VASCULAR SURGERY PRACTICE FOR SALE. Excellent gross. Fully equipped. Very reasonable. Write C-901, P.O. Box 2411, Jacksonville, Florida 32203.

CENTRAL FLORIDA FAMILY PRACTICE FOR SALE. Growing practice in Maitland with a 95% collection rate. Partially equipped condo-office in medical complex with 1,200 sq. ft. of office space. Owner retiring. For details call (305) 647-6454 or 830-0570.

ONCOLOGIST/INTERNIST, planning to return to academic medicine, seeks colleague to buy or assume lucrative busy practice. Modern, fully equipped office designed for two physicians. Superb location, South Florida Gold Coast, convenient to hospitals, housing, highways. You must see this opportunity to believe it. Reply with phone number to C-908, P.O. Box 2411, Jacksonville, Florida 32203.

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### Equipment

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FLORIDA LICENSED PHYSICIAN NEEDED immediately to take over active general practice in Broward County. Sale is for equipment only. Excellent gross. Write C-914, P.O. Box 2411, Jacksonville, Florida 32203.

### Real Estate

OUTSTANDING LOCATION FOR SPECIALIST: St. Nicholas Medical Center. Central location, off street parking and all utilities furnished (including janitor service). Contact W. G. Allen, Jr., Owner-Manager, St. Nicholas Medical Center, 3127 Atlantic Boulevard, Jacksonville 32207. Phone: (904) 398-5500.

LAKELAND, FLORIDA: FOR SALE, 6% down. Air-conditioned office for one to three physicians. Main street, 168 x 140 ft.; double parking lots; extra cottage. Dr. L. Polskin, Box 15966, Honolulu, Hawaii 96815.

FLORIDA — (SOUTHEAST) — DELRAY: Offices for lease in single story medical plaza adjacent to Interstate-95; busy intersection and newly built convalescent center; tremendous opportunity to grow with a rapidly growing middle class community of single-family and condominium dwellings. Contact: Lawrence M. Landis, 900 S. Congress Ave., Delray, Florida 33445. Phone: (305) 278-0062.

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JACKSONVILLE. 1,500 square feet, medically designed office available in newly refurbished Shops of Sherwood (northwest area of Jacksonville). A/C, ample parking. Located in stable, middle income residential community which needs medical doctor. Ideal for growing practice. Some equipment available. Start at $250 per month. Call collect (305) 446-4284.

MODULAR OFFICE. 1,440 SQ. FT. EASILY MOVABLE. Two waiting rooms, three examining rooms, three offices. Lab. area. Kitchen. Carpeted. Details (904) 726-8660.

6500 PATIENTS WAITING NEW PHYSICIAN to practice in growing Beverly Hills. Professional building for sale $58,900 excellent terms. Pictures and specifications. Tom Moyles Real Estate, Box 1378, Crystal River, Florida. Phone (904) 795-4004.

FOR SALE: Otolaryngology practice for sale in beautiful Gulf Coast city. Please call (904) 242-1161 or after hours (904) 242-9836, the address is 352-A Racetrack Road, Ft. Walton Beach, Florida 32548.

PROFESSIONAL MEDICAL BUILDING — Doctor — plus law firm, with three more available rentals. 4,000 square feet. Crystal River area. Priced at $154,000, Terms. Salesman Billy Blue — Res. (904) 795-4906. John J. Piccione Real Estate, Inc., Reg. Real Estate Broker, 2941 North East 3rd St., Ocala, Florida 32670.

TARPON SPRINGS: Finally, Medical/Dental office space is available in prime Tarpon Springs location; Attractive reception area plus 7 rooms — 1,500 sq. ft. Just $525 per month. Also, at same location; 1,000 sq. ft. — reception room plus 3 offices — $350 per month. Both immediate occupancy and ample parking. Phone: (813) 937-3111.

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**Florida Medical Association Annual Meeting, May 23-27, 1979**

ROCHE

# For recurrent attacks of urinary tract infection in women

# Bactrim™ DS Double Strength Tablets

Each tablet contains 160 mg trimethoprim and 800 mg sulfamethoxazole.

## Just one tablet b.i.d. for 10 to 14 days

- Action at urinary/vaginal/lower bowel sites helps eliminate reservoirs of infecting organisms
- Distinctive antibacterial action plus wide spectrum helps eradicate recurrent UTI
- Low incidence of bacterial resistance in community practice
- Convenient *b.i.d.* dosage provides day-and-night antibacterial control
- Contraindicated during pregnancy and the nursing period. During therapy, maintain adequate fluid intake; perform CBC's and urinalyses with microscopic examination.

**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms:** *Escherichia coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris, Proteus morganii.* **It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination.** *Note:* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

**Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.**

The recommended quantitative disc susceptibility method (*Federal Register, 37*:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

**Contraindications:** Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers; infants less than two months of age.

**Warnings:** Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

**Precautions:** Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

**Adverse Reactions:** All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

**Dosage: Not recommended for infants less than two months of age.**

*Urinary Tract Infections:* Usual adult dosage—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

Recommended dosage for children—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. A guide follows:

*Children two months of age or older.*

| Weight | | Dose—every 12 hours | |
|---|---|---|---|
| lbs | kgs | Teaspoonfuls | Tablets |
| 20 | 9 | 1 teasp. (5 ml) | ½ tablet |
| 40 | 18 | 2 teasp. (10 ml) | 1 tablet |
| 60 | 27 | 3 teasp. (15 ml) | 1½ tablets |
| 80 | 36 | 4 teasp. (20 ml) | 2 tablets or 1 DS tablet |

For patients with renal impairment:

| Creatinine Clearance (ml/min) | Recommended Dosage Regimen |
|---|---|
| Above 30 | Usual standard regimen |
| 15-30 | ½ the usual regimen |
| Below 15 | Use not recommended |

*Pneumocystis carinii pneumonitis:* Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

**Supplied:** *Double Strength (DS) tablets,* each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. *Tablets,* each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10. *Oral suspension,* containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole, fruit-licorice flavored—bottles of 16 oz (1 pint).

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Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

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# the Bactrim™ 3-system counterattack

ROCHE

Bactrim has shown high clinical effectiveness in recurrent cystitis as a result of its wide spectrum and distinctive antimicrobial action in the urinary, vaginal and lower intestinal tracts.

The probability of recurrent urinary tract infection appears to be enhanced by the establishment of large numbers of *E. coli* or other urinary pathogens on the vaginal introitus. The trimethoprim component of Bactrim diffuses into vaginal fluid in effective concentrations, thus combating migration of pathogens into the urethra.

Studies have shown that Bactrim acts against *Enter bacteriaceae* in the bowel without the emergence of res tant organisms. Thus, Bactrim reduces the risk of intro colonization by fecal uropathogens. It has *no* significant effect on other normal, necessary intestinal flora.

**Bactrim fights u urinary tract/vaginal t ract**

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# SPECIAL ISSUE ON NUTRITION

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*PNEUMOCYSTIS CARINII PNEUMONITIS*

*SHIGELLOSIS*

*ACUTE OTITIS MEDIA*

*Involving susceptible organisms.

Please see Indications section in summary of product information on last page of this advertisement.

# NOW...
# ROCHE INTRODUCES

## *NEW CHERRY FLAVOR*

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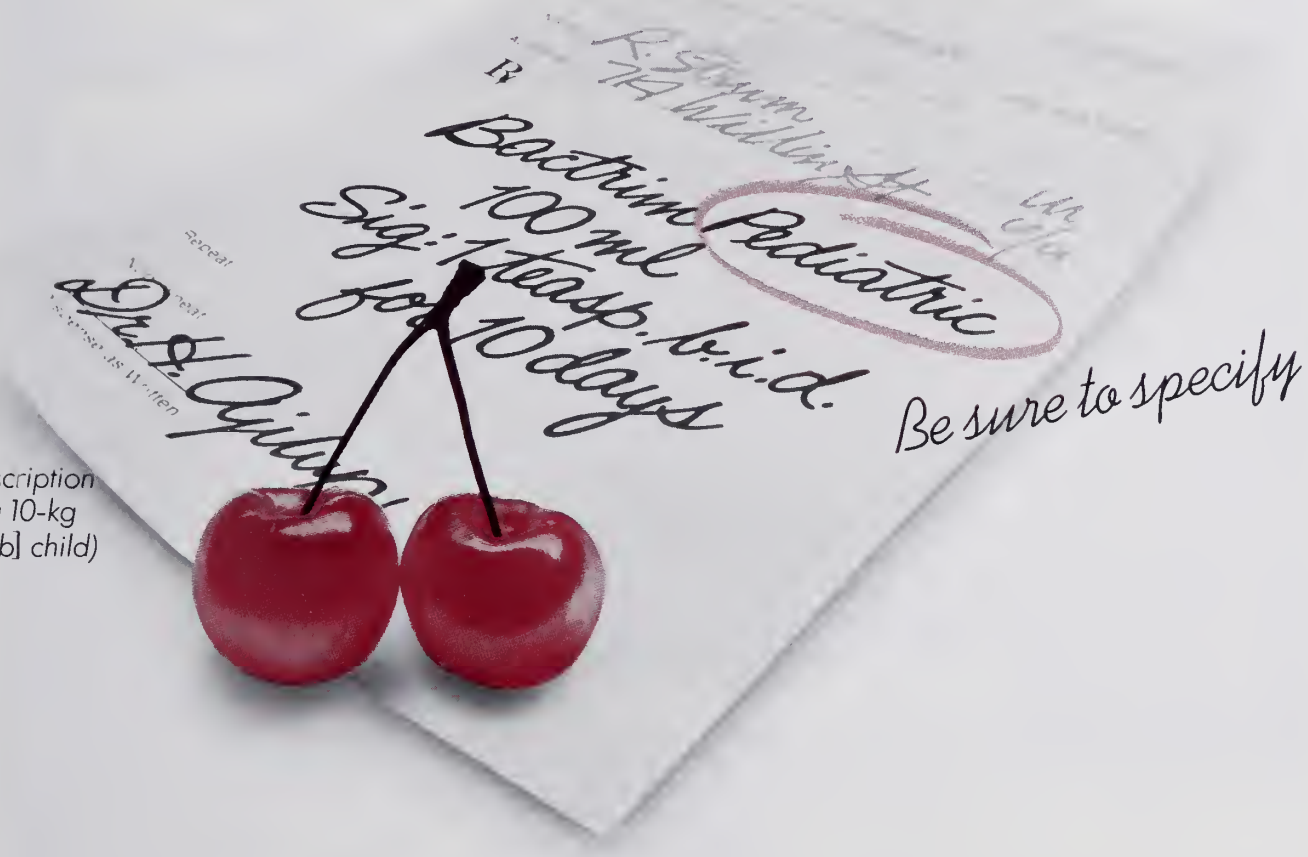
ROCHE *SUSPENSION*

Each teaspoonful (5 ml) contains
40 mg trimethoprim and 200 mg sulfamethoxazole.




*(Prescription for a 10-kg [22-lb] child)*

## *ESPECIALLY FLAVORED FOR CHILDREN**

*Also available: The original fruit-licorice flavor to be prescribed as "Bactrim Suspension." The same active ingredient formulation—the difference is the flavor.*

*Contraindicated in children under 2 months of age.

Please see summary of product information on following page.

# BACTRIM™

ROCHE

(trimethoprim and sulfamethoxazole)

**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris, Proteus morganii.* It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination.** *Note* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections

**For acute otitis media in children due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over other antimicrobials. Limited clinical information presently available on effectiveness of treatment of otitis media with Bactrim when infection is due to ampicillin-resistant *Haemophilus influenzae*. To date, there are limited data on the safety of repeated use of Bactrim in children under two years of age. Bactrim is not indicated for prophylactic or prolonged administration in otitis media at any age.**

**For enteritis due to susceptible strains of *Shigella flexneri* and *Shigella sonnei* when antibacterial therapy is indicated.**

**Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.**

**Contraindications:** Hypersensitivity to trimethoprim or sulfonamides, pregnancy, nursing mothers, infants less than two months of age

**Warnings: BACTRIM SHOULD NOT BE USED TO TREAT STREPTOCOCCAL PHARYNGITIS.** Clinical studies show that patients with group A β-hemolytic streptococcal tonsillopharyngitis have higher incidence of bacteriologic failure when treated with Bactrim than do those treated with penicillin. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended, therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

**Precautions:** Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function. Bactrim may prolong prothrombin time in those receiving warfarin, reassess coagulation time when administering Bactrim to these patients.

**Adverse Reactions:** All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients, cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

**Dosage: Not recommended for infants less than two months of age.**

*URINARY TRACT INFECTIONS AND SHIGELLOSIS IN ADULTS AND CHILDREN, AND ACUTE OTITIS MEDIA IN CHILDREN*

*Adults:* Usual adult dosage for urinary tract infections—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days. Use identical daily dosage for 5 days for shigellosis.

*Children:* Recommended dosage for children with urinary tract infections or acute otitis media—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis. A guide follows:

*Children two months of age or older*

| Weight | | Dose—every 12 hours | |
|---|---|---|---|
| lbs | kgs | Teaspoonfuls | Tablets |
| 22 | 10 | 1 teasp. (5 ml) | ½ tablet |
| 44 | 20 | 2 teasp. (10 ml) | 1 tablet |
| 66 | 30 | 3 teasp. (15 ml) | 1½ tablets |
| 88 | 40 | 4 teasp. (20 ml) | 2 tablets or 1 DS tablet |

For patients with renal impairment

| Creatinine Clearance (ml/min) | Recommended Dosage Regimen |
|---|---|
| Above 30 | Usual standard regimen |
| 15-30 | ½ the usual regimen |
| Below 15 | Use not recommended |

*PNEUMOCYSTIS CARINII PNEUMONITIS:* Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

**Supplied:** *Double Strength (DS) tablets*, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100, Tel-E-Dose* packages of 100, Prescription Paks of 20. *Tablets*, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500, Tel-E-Dose* packages of 100, Prescription Paks of 40, available singly and in trays of 10. *Pediatric Suspension*, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole, cherry flavored—bottles of 16 oz (1 pint). *Suspension*, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole, fruit-licorice flavored—bottles of 16 oz (1 pint).

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Airport Milton Inn
Memphis, Tennessee

April 19–21 **Alabama Medical Association**
Birmingham Hyatt House, Civic Center
Birmingham, Alabama

April 19–22 **Missouri State Medical Association**
Chase-Park Plaza Hotel
St. Louis, Missouri

April 20–22 **Georgia Medical Association**
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Savannah, Georgia

April 21–22 **Iowa Medical Society**
Hyatt House
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Little Rock Convention Center
Little Rock, Arkansas

April 25–29 **Arizona Medical Association**
Safari Hotel
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April 26–29 **South Carolina Medical Association**
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Myrtle Beach, South Carolina

April 29–May 2 **Nebraska Medical Association**
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## This Issue

We are deeply grateful to Dr. Lewis A. Barness, Guest Editor of this Special Issue on Nutrition and to Dr. Yank D. Coble Jr., Dr. George Christakis and Dr. Donald I. Macdonald, Guest Co-Editors, for bringing this special issue to our readers. We are also most grateful to the authors and contributors to this issue of The Journal. (See contents on opposite page).

## Information

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APRIL COVER — The Journal of the Florida Medical Association is most pleased to have this cover done by Frank H. Netter, M.D., one of America's foremost medical illustrators. This is the third cover Dr. Netter has done for *The Journal* in recent years. His previous works covered the Special Issues on Dermatology (January 1976) and Neurosurgery (November 1976).

# SPECIAL ISSUE ON NUTRITION

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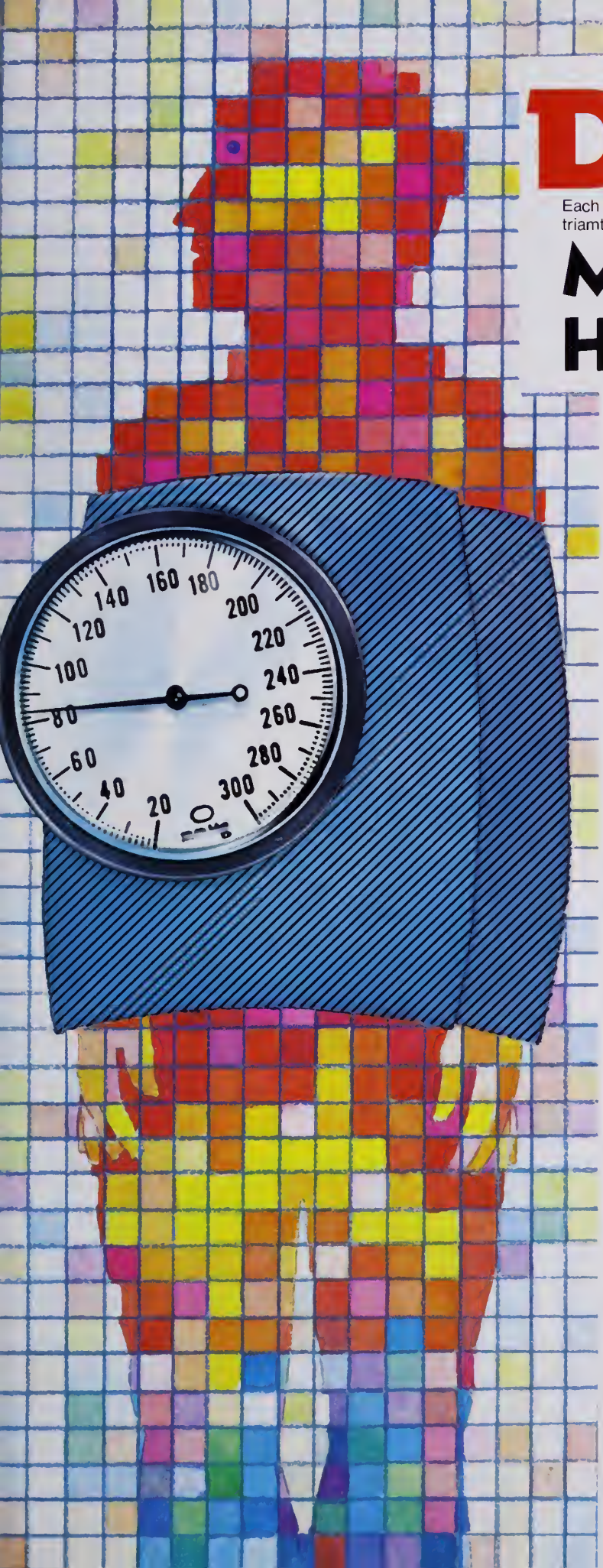

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Each capsule contains 50 mg. of Dyrenium* (brand of triamterene) and 25 mg. of hydrochlorothiazide.

# Makes Sense in Hypertension*

**Before prescribing, see complete prescribing information in SK&F Co. literature or *PDR*. A brief summary follows:**

* **Warning**
This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

**Contraindications:** Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

**Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired.** If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K+ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

**Precautions:** Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spironolactone is used concomitantly, determine serum K+ frequently; both can cause K+ retention and elevated serum K+. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine.

**Adverse Reactions:** Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

**Supplied:** Bottles of 100 and 1000 capsules; Single Unit Packages of 100 (intended for institutional use only).

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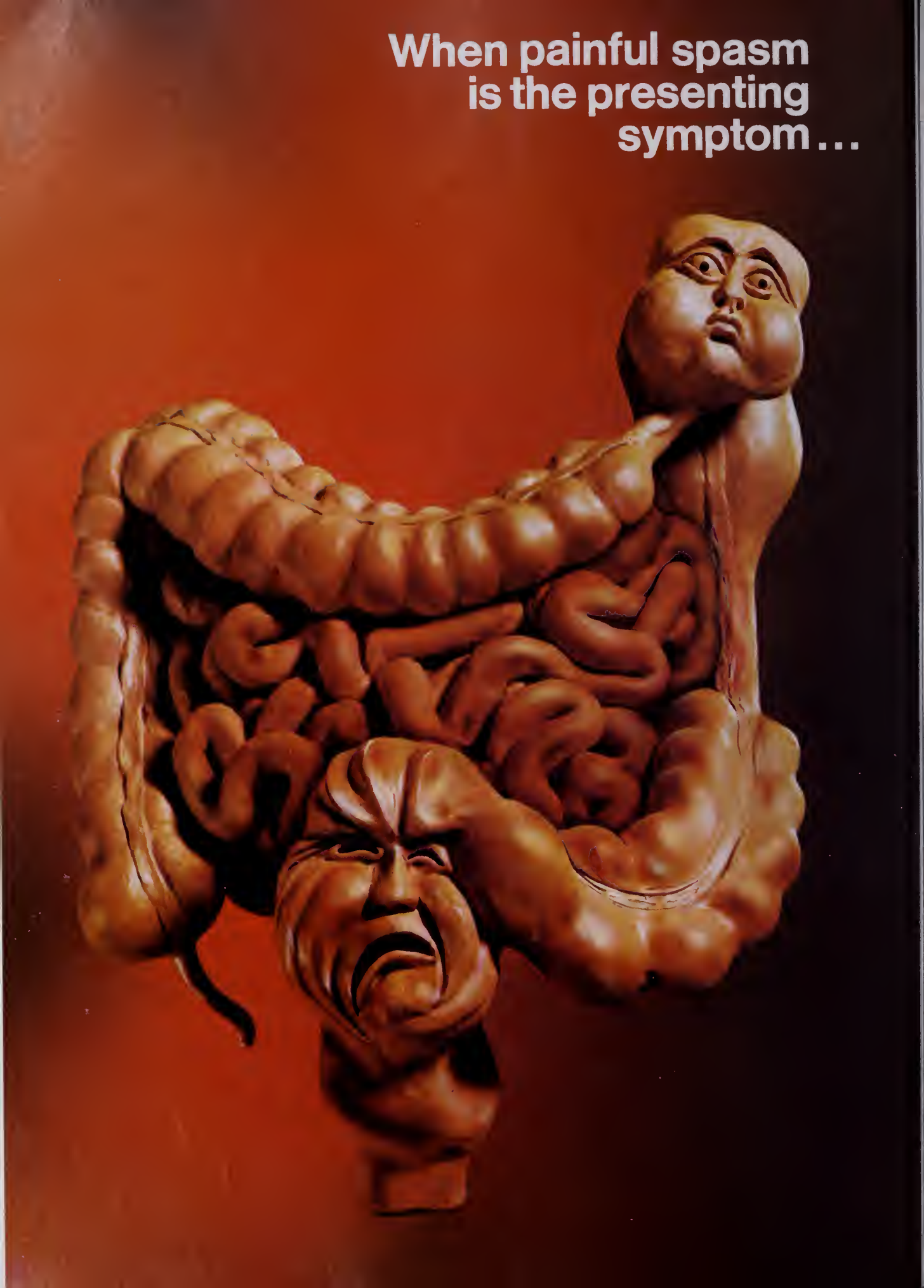
When painful spasm is the presenting symptom...



...in the functional bowel/irritable bowel syndrome*

# Bentyl®

## (dicyclomine hydrochloride USP)

10 mg. capsules, 20 mg. tablets,
10 mg./5 ml. syrup, 10 mg./ml. injection

helps control abnormal motor activity
with minimal anticholinergic side effects†

Demonstrated smooth muscle relaxant activity.

In this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

. . . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.

Pylorospasm has almost totally blocked passage of barium meal.

Barium meal beginning to pass 10 minutes after intramuscular injection of 20 mg. Bentyl.

*"The correlation of spasm relief and drug given was excellent."*

*This drug has been classified "probably" effective in treating functional bowel/irritable bowel syndrome.

†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:
King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

**Merrell**

8-4420 (Y736A) MNR-804

# Bentyl®

## (dicyclomine hydrochloride USP)

Capsules, Tablets, Syrup, Injection

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATIONS

Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the following indications as "probably" effective

For the treatment of functional bowel/irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

CONTRAINDICATIONS: Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient; unstable cardiovascular status in acute hemorrhage; severe ulcerative colitis; toxic megacolon complicating ulcerative colitis, myasthenia gravis WARNINGS: In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug PRECAUTIONS: Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy Use with caution in patients with Autonomic neuropathy Hepatic or renal disease. Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate With overdosage, a curare-like action may occur. ADVERSE REACTIONS. Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention, blurred vision and tachycardia; palpitations; mydriasis, cycloplegia, increased ocular tension; loss of taste; headache; nervousness, drowsiness, weakness; dizziness, insomnia, nausea; vomiting; impotence; suppression of lactation; constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons, and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation DOSAGE AND ADMINISTRATION: Dosage must be adjusted to individual patient's needs

*Usual Dosage* Bentyl 10 mg capsule and syrup *Adults* 1 or 2 capsules or teaspoonfuls syrup three or four times daily. *Children* 1 capsule or teaspoonful syrup three or four times daily. *Infants* ½ teaspoonful syrup three or four times daily (May be diluted with equal volume of water.) Bentyl 20 mg. *Adults* 1 tablet three or four times daily. Bentyl Injection: *Adults*. 2 ml. (20 mg.) every four to six hours intramuscularly only NOT FOR INTRAVENOUS USE MANAGEMENT OF OVERDOSE: The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested If indicated, parenteral cholinergic agents such as Urecholine® (bethanecol chloride USP) should be used.

Product Information as of October, 1978

Injectable dosage forms manufactured by CONNAUGHT LABORATORIES, INC., Swiftwater, Pennsylvania 18370 or TAYLOR PHARMACAL COMPANY, Decatur, Illinois 62525 for MERRELL-NATIONAL LABORATORIES, Division of Richardson-Merrell Inc., Cincinnati, Ohio 45215, U.S.A

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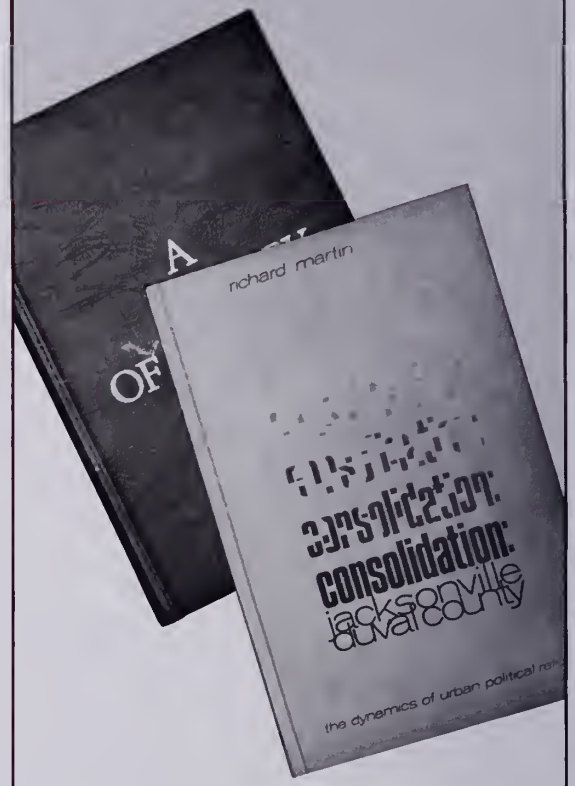


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**INDICATIONS**: *Therapeutically,* (as an adjunct to systemic therapy when indicated), for topical infections, primary or secondary, due to susceptible organisms, as in: infected burns, skin grafts, surgical incisions, otitis externa; primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia); secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis); traumatic lesions, inflamed or suppurating as a result of bacterial infection. *Prophylactically,* the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

**CONTRAINDICATIONS:** This product is contraindicated in those individuals who have shown hypersensitivity to any of its components. Do not use in the eyes or in the external ear canal if the eardrum is perforated.

**WARNING**: Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-contalning applications should be avoided for that patient thereafter.

**PRECAUTIONS:** As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

**ADVERSE REACTIONS:** Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.

# Conduct with Pronestyl® Tablets

## Procainamide Hydrochloride Tablets

**The only procainamide in veneer-coated, easy-to-swallow tablets**

**250 mg** **375 mg** **500 mg**

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See following page for brief summary

# PRONESTYL® TABLETS
## Procainamide Hydrochloride Tablets

The prolonged administration of procainamide often leads to the development of a positive anti-nuclear antibody (ANA) test with or without symptoms of lupus erythematosus-like syndrome. If a positive ANA titer develops, the benefit/risk ratio related to continued procainamide therapy should be assessed. This may necessitate considerations of alternative anti-arrhythmic therapy.

**DESCRIPTION:** Pronestyl (Procainamide Hydrochloride) is the amide analogue of procaine hydrochloride and is available for oral administration as veneer-coated tablets providing 250 mg, 375 mg, and 500 mg procainamide hydrochloride.

**CONTRAINDICATIONS:** In patients with myasthenia gravis and where a hypersensitivity to procainamide exists; bear in mind cross sensitivity to procaine and related drugs. Should not be given to patients with complete atrioventricular heart block. Contraindicated in cases of second degree and third degree A-V block unless an electrical pacemaker is operative.

**PRECAUTIONS:** Evidence of untoward myocardial responses should be carefully watched for in all patients. In the presence of myocardial damage with atrial fibrillation or flutter, the ventricular rate may increase suddenly as the atrial rate is slowed; adequate digitalization reduces but does not abolish this danger. Ventricular tachysystole is particularly hazardous if myocardial damage exists.

The dislodgment of mural thrombi producing an embolic episode may occur in correcting atrial fibrillation due to the forceful contractions of the atrium.

Extreme caution is required in attempting to adjust the heart rate when ventricular tachycardia has occurred during an occlusive coronary episode or where the use of procainamide may result in additional depression of conduction and ventricular asystole or fibrillation as in second degree and third degree A-V block, bundle branch block, or severe digitalis intoxication.

Bear in mind when treating ventricular arrhythmias in patients with severe organic heart disease and ventricular tachycardia that complete heart block, which may be difficult to diagnose, may be present. Since asystole may result if the ventricular rate is significantly slowed without attainment of regular atrioventricular conduction, procainamide should be stopped and the patient re-evaluated.

In the presence of both liver and kidney damage, normal dosage may produce symptoms of overdosage—principally ventricular tachycardia and severe hypotension.

A syndrome resembling lupus erythematosus has been reported with oral maintenance procainamide therapy. Common symptoms are polyarthralgia, arthritis and pleuritic pain. Fever, myalgia, skin lesions, pleural effusion and pericarditis may also occur. Rare cases of thrombocytopenia or Coombs-positive hemolytic anemia, possibly related to this syndrome, have been reported. Measure anti-nuclear antibody titers at regular intervals in patients on procainamide for extended periods of time or in whom symptoms suggestive of lupus-like reaction appear; in event of rising titer (anti-nuclear antibody) or clinical symptoms of LE, assess the benefit/risk ratio related to continued procainamide therapy (see boxed Warning). Steroid therapy may be effective if discontinuation of procainamide does not cause remission of symptoms. If the syndrome develops in a patient with recurrent life-threatening arrhythmias not otherwise controllable, steroid-suppressive therapy may be used concomitantly with procainamide.

**ADVERSE REACTIONS:** Hypotension is rare with oral administration. Serious disturbances of cardiac rhythm such as ventricular asystole or fibrillation are more common with I.V. administration.

Large oral doses may sometimes produce anorexia, nausea, urticaria, and/or pruritus.

A syndrome resembling lupus erythematosus has been reported in patients on oral maintenance therapy (see Precautions). Reactions consisting of fever and chills have been reported, including a case with nausea, vomiting, abdominal pain, acute hepatomegaly, and a rise in serum glutamic oxaloacetic transaminase following single doses of the drug. Agranulocytosis has been occasionally reported following repeated use of the drug, and deaths have occurred. Therefore, routine blood counts are advisable during maintenance procainamide therapy; and the patient should be instructed to report any soreness of the mouth, throat or gums, unexplained fever or any symptoms of upper respiratory tract infection. If any of these symptoms should occur and leukocyte counts indicate cellular depression, procainamide therapy should be discontinued and appropriate treatment should be instituted immediately. Bitter taste, diarrhea, weakness, mental depression, giddiness, psychosis with hallucinations, and hypersensitivity reactions such as angioneurotic edema and maculopapular rash have been reported.

For full prescribing information, consult package insert.

**HOW SUPPLIED:** Pronestyl Tablets (Procainamide Hydrochloride Tablets) providing 250 mg, 375 mg, and 500 mg procainamide hydrochloride are available in bottles of 100 and Unimatic® single-dose packaging in cartons of 100. The 250 mg and 500 mg tablets are also available in bottles of 1000.

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# with symptomatic relief of moderate anxiety with depression

**Rapid relief of the symptoms of moderate anxiety in many patients**

The tranquilizer component alleviates symptoms of anxiety and agitation within a few days, without apparent dulling of mental acuity. Hypnotic effects from the tranquilizer component appear to be minimal, particularly in patients permitted to remain active. However, TRIAVIL may impair mental and/or physical abilities required for the performance of hazardous tasks.

**Highly effective antidepressant action**

The antidepressant component relieves symptoms of depression such as poor concentration and feelings of hopelessness as well as early morning awakening; adequate relief of symptoms may take a few weeks or even longer.

**Increased activity potential often results from symptomatic relief**

As the symptoms of anxiety and depression respond to TRIAVIL, many patients may show renewed interest in family and recreational activities and are able to function more effectively at work.

**More prescribing convenience**

For optimal flexibility there are now *five* tablet strengths of TRIAVIL for ease of dosage adjustment. For initial management of patients with moderate anxiety and depression, one TRIAVIL® 2-25, containing 2 mg perphenazine and 25 mg amitriptyline HCl, t.i.d. may often be adequate. TRIAVIL® 4-50, containing 4 mg perphenazine and 50 mg amitriptyline HCl, provides b.i.d. convenience for those patients needing the larger total daily dose of 8 mg perphenazine and 100 mg amitriptyline HCl as initial or maintenance therapy.

**Treatment with TRIAVIL—a balanced view:**

TRIAVIL is contraindicated in CNS depression from drugs, in the presence of evidence of bone marrow depression, and in patients hypersensitive to phenothiazines or amitriptyline. It should not be used during the acute recovery phase following myocardial infarction or in patients who have received an MAOI within two weeks. Patients with cardiovascular disorders should be watched closely. Not recommended in children or during pregnancy. TRIAVIL may impair mental and/or physical abilities required for performance of hazardous tasks and may enhance the response to alcohol. Antiemetic effect may obscure toxicity due to overdosage of other drugs or mask other disorders. The possibility of suicide in depressed patients remains until significant remission occurs. Such patients should not have access to large quantities of the drug. Hospitalize as soon as possible any patient suspected of having taken an overdose.

For moderate anxiety with depression

dual-action Triavil®

containing perphenazine and amitriptyline HCl

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*Please see following page for a brief summary of prescribing information.*

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## More dosage strengths than any other formulation containing a tranquilizer and an antidepressant

# dual-action TRIAVIL®

## containing perphenazine and amitriptyline HCl

**Available:**
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TRIAVIL® 2-10: Each tablet contains
2 mg perphenazine and 10 mg amitriptyline HCl.
TRIAVIL® 4-50: Each tablet contains
4 mg perphenazine and 50 mg amitriptyline HCl.
TRIAVIL® 4-25: Each tablet contains
4 mg perphenazine and 25 mg amitriptyline HCl.
TRIAVIL® 4-10: Each tablet contains
4 mg perphenazine and 10 mg amitriptyline HCl.

**CONTRAINDICATIONS:** Central nervous system depression from drugs (barbiturates, alcohol, narcotics, analgesics, antihistamines); evidence of bone marrow depression; known hypersensitivity to phenothiazines or amitriptyline. Should not be given concomitantly with a monoamine oxidase inhibitor since hyperpyretic crises, severe convulsions, and deaths have occurred from such combinations. When used to replace a monoamine oxidase inhibitor, allow a minimum of 14 days to elapse before initiating therapy with TRIAVIL. Therapy should then be initiated cautiously with gradual increase in dosage until optimum response is achieved. Not recommended for use during acute recovery phase following myocardial infarction.

**WARNINGS:** TRIAVIL should not be given concomitantly with guanethidine or similarly acting compounds since TRIAVIL may block the antihypertensive action of such compounds. Use cautiously in patients with history of urinary retention, angle-closure glaucoma, increased intraocular pressure, or convulsive disorders. Dosage of anticonvulsive agents may have to be increased. In patients with angle-closure glaucoma, even average doses may precipitate an attack. Patients with cardiovascular disorders should be watched closely. Tricyclic antidepressants, including amitriptyline HCl, have been reported to produce arrhythmias, sinus tachycardia, and prolongation of conduction time, particularly in high doses. Myocardial infarction and stroke have been reported with tricyclic antidepressant drugs. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. May impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle. In patients who use alcohol excessively, potentiation may increase the danger inherent in any suicide attempt or overdosage. Not recommended in children or during pregnancy.

**PRECAUTIONS:** Suicide is a possibility in depressed patients and may remain until significant remission occurs. Such patients should not have access to large quantities of this drug.

**Perphenazine:** Should not be used indiscriminately. Use with caution in patients who have previously exhibited severe adverse reactions to other phenothiazines. Likelihood of some untoward actions is greater with high doses. Closely supervise with any dosage. The antiemetic effect of perphenazine may obscure signs of toxicity due to overdosage of other drugs or make more difficult the diagnosis of disorders such as brain tumor or intestinal obstruction. A significant, not otherwise explained, rise in body temperature may suggest individual intolerance to perphenazine, in which case discontinue.

If hypotension develops, epinephrine should not be employed, as its action is blocked and partially reversed by perphenazine. Phenothiazines may potentiate the action of central nervous system depressants (opiates, analgesics, antihistamines, barbiturates, alcohol) and atropine. In concurrent therapy with any of these, TRIAVIL should be given in reduced dosage. May also potentiate the action of heat and phosphorous insecticides. There is sufficient experimental evidence to conclude that chronic administration of antipsychotic drugs which increase prolactin secretion has the potential to induce mammary neoplasms in rodents under the appropriate conditions. There are recognized differences in the physiological role of prolactin between rodents and humans. Since there are, at present, no adequate epidemiological studies, the relevance to human mammary cancer risk from prolonged exposure to perphenazine and other antipsychotic drugs is not known.

**Amitriptyline:** In manic-depressive psychosis, depressed patients may experience a shift toward the manic phase if they are treated with an antidepressant. Patients with paranoid symptomatology may have an exaggeration of such symptoms. The tranquilizing effect of TRIAVIL seems to reduce the likelihood of this effect. When amitriptyline HCl is given with anticholinergic agents or sympathomimetic drugs, including epinephrine combined with local anesthetics, close supervision and careful adjustment of dosages are required. Paralytic ileus may occur in patients taking tricyclic antidepressants in combination with anticholinergic-type drugs.

Caution is advised if patients receive large doses of ethchlorvynol concurrently. Transient delirium has been reported in patients who were treated with 1 g of ethchlorvynol and 75-150 mg of amitriptyline HCl.

Amitriptyline HCl may enhance the response to alcohol and the effects of barbiturates and other CNS depressants.

Concurrent administration of amitriptyline HCl and electroshock therapy may increase the hazards associated with such therapy. Such treatment should be limited to patients for whom it is essential. Discontinue several days before elective surgery if possible. Elevation and lowering of blood sugar levels have both been reported. Use with caution in patients with impaired liver function.

**ADVERSE REACTIONS:** Similar to those reported with either constituent alone.
**Perphenazine:** Extrapyramidal symptoms (opisthotonus, oculogyric crisis, hyperreflexia, dystonia, akathisia, acute dyskinesia, ataxia, parkinsonism) have been reported and can usually be controlled by the concomitant use of effective antiparkinsonian drugs and/or by reduction in dosage, but sometimes persist after discontinuation of the phenothiazine.

Tardive dyskinesia may appear in some patients on long-term therapy or may occur after drug therapy with phenothiazines and related agents has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. Symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth, or jaw. Involuntary movements of the extremities sometimes occur. There is no known treatment for tardive dyskinesia; antiparkinsonism agents usually do not alleviate the symptoms. It is advised that all antipsychotic agents be discontinued if the above symptoms appear. If treatment is reinstituted, or dosage of the particular drug increased, or another drug substituted, the syndrome may be masked. Fine vermicular movements of the tongue may be an early sign of the syndrome. The full-blown syndrome may not develop if medication is stopped when lingual vermiculation appears.

Other side effects are skin disorders (photosensitivity, itching, erythema, urticaria, eczema, up to exfoliative dermatitis); other allergic reactions (asthma, laryngeal edema, angioneurotic edema, anaphylactoid reactions); peripheral edema; reversed epinephrine effect; hyperglycemia; endocrine disturbances (lactation, galactorrhea, gynecomastia, disturbances of menstrual cycle); altered cerebrospinal fluid proteins; paradoxical excitement; hypertension, hypotension, tachycardia, and ECG abnormalities (quinidine-like effect); reactivation of psychotic processes; catatonic-like states; autonomic reactions, such as dry mouth or salivation, headache, anorexia, nausea, vomiting, constipation, obstipation, urinary frequency or incontinence, blurred vision, nasal congestion, and a change in pulse rate; other adverse reactions reported with various phenothiazine compounds, but not with perphenazine, include grand mal convulsions, cerebral edema, polyphagia, pigmentary retinopathy, photophobia, skin pigmentation, and failure of ejaculation.

The phenothiazine compounds have produced blood dyscrasias (pancytopenia, thrombocytopenic purpura, leukopenia, agranulocytosis, eosinophilia); and liver damage (jaundice, biliary stasis).

Pigmentation of the cornea and lens has been reported to occur after long-term administration of some phenothiazines. Although it has not been reported in patients receiving TRIAVIL, the possibility that it might occur should be considered.

Hypnotic effects, lassitude, muscle weakness, and mild insomnia have also been reported.

**Amitriptyline:** Note: Listing includes a few reactions not reported for this drug, but which have occurred with other pharmacologically similar tricyclic antidepressant drugs and must be considered when amitriptyline is administered. *Cardiovascular:* Hypotension; hypertension; tachycardia; palpitation; myocardial infarction; arrhythmias; heart block; stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus; syndrome of inappropriate ADH (antidiuretic hormone) secretion. *Anticholinergic:* Dry mouth; blurred vision; disturbance of accommodation; increased intraocular pressure; constipation; paralytic ileus; urinary retention; dilatation of urinary tract. *Allergic:* Skin rash; urticaria; photosensitization; edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis; leukopenia; eosinophilia; purpura; thrombocytopenia. *Gastrointestinal:* Nausea; epigastric distress; vomiting; anorexia; stomatitis; peculiar taste; diarrhea; parotid swelling; black tongue. Rarely hepatitis (including altered liver function and jaundice). *Endocrine:* Testicular swelling and gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido; elevated or lowered blood sugar levels. *Other:* Dizziness, weakness; fatigue; headache; weight gain or loss; increased perspiration; urinary frequency; mydriasis; drowsiness; alopecia. *Withdrawal Symptoms:* Abrupt cessation after prolonged administration may produce nausea, headache, and malaise. These are not indicative of addiction.

**OVERDOSAGE:** All patients suspected of having taken an overdosage should be admitted to a hospital as soon as possible. Treatment is symptomatic and supportive. However, the intravenous administration of 1–3 mg of physostigmine salicylate is reported to reverse the symptoms of tricyclic antidepressant poisoning. Because physostigmine is rapidly metabolized, the dosage of physostigmine should be repeated as required particularly if life-threatening signs such as arrhythmias, convulsions, and deep coma recur or persist after the initial dosage of physostigmine. On this basis, in severe overdosage with perphenazine-amitriptyline combinations, symptomatic treatment of central anticholinergic effects with physostigmine salicylate should be considered.

J8TR31 (DC6613215)

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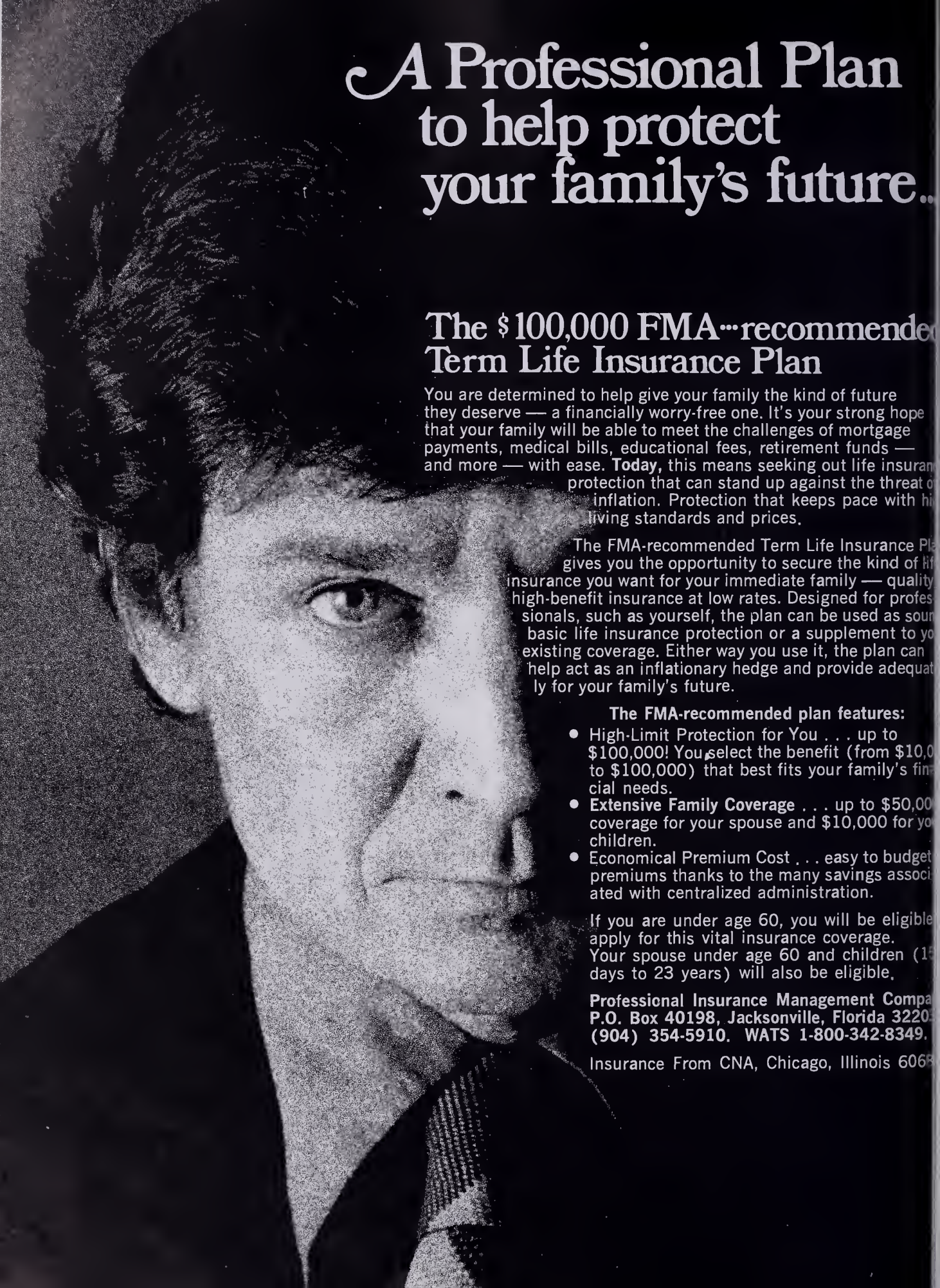
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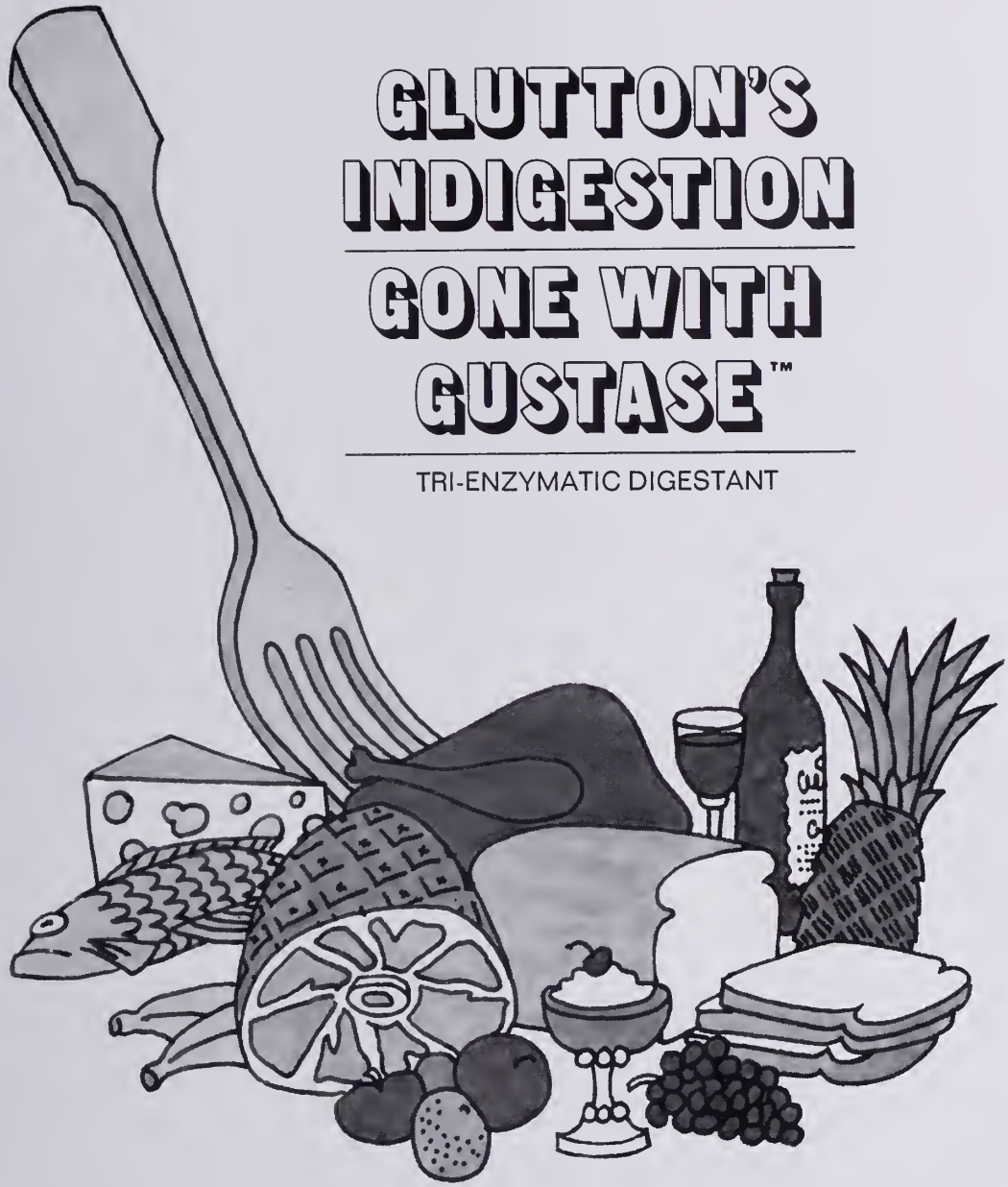

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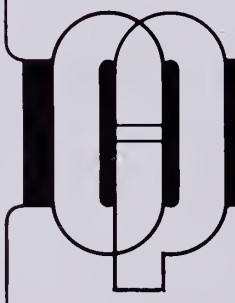

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JACKSONVILLE,
FLORIDA 32206

PHONE 904/354-5555



# Librax®

Each capsule contains 5 mg
chlordiazepoxide HCl and 2.5 mg clidinium Br.

**Please consult complete prescribing information, a summary of which follows:**

**Indications:** Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

"Possibly" effective: as adjunctive therapy in the treatment of peptic ulcer and in the treatment of the irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

Final classification of the less-than-effective indications requires further investigation.

**Contraindications:** Glaucoma; prostatic hypertrophy, benign bladder neck obstruction; hypersensitivity to chlordiazepoxide HCl and/or clidinium Br.

**Warnings:** Caution patients about possible combined effects with alcohol and other CNS depressants, and against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Physical and psychological dependence rarely reported on recommended doses, but use caution in administering Librium® (chlordiazepoxide HCl) to known addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions) reported following discontinuation of the drug.

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy. Advise patients to discuss therapy if they intend to or do become pregnant.**

As with all anticholinergics, inhibition of lactation may occur.

**Precautions:** In elderly and debilitated, limit dosage to smallest effective amount to preclude ataxia, oversedation, confusion (no more than 2 capsules/day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider pharmacology of agents, particularly potentiating drugs such as MAO inhibitors, phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions reported in psychiatric patients. Employ usual precautions in treating anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship not established.

**Adverse Reactions:** No side effects or manifestations not seen with either compound alone reported with Librax. When chlordiazepoxide HCl is used alone, drowsiness, ataxia, confusion may occur, especially in elderly and debilitated; avoidable in most cases by proper dosage adjustment, but also occasionally observed at lower dosage ranges. Syncope reported in a few instances. Also encountered: isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent, generally controlled with dosage reduction; changes in EEG patterns may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice, hepatic dysfunction reported occasionally with chlordiazepoxide HCl, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax typical of anticholinergic agents, *i.e.*, dryness of mouth, blurring of vision, urinary hesitancy, constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

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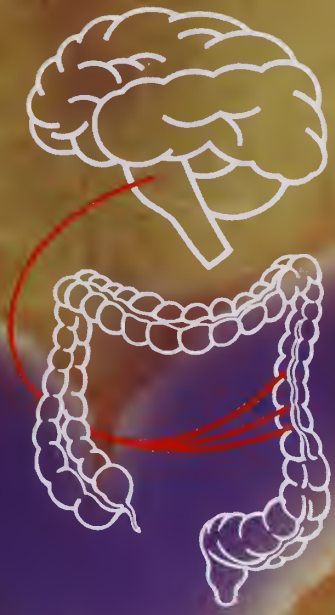

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Since October 1974 when Motrin® (ibuprofen) was introduced in the United States, it has been used by more than 6,000,000 patients with rheumatoid arthritis* or osteoarthritis. Rarely has an ethical pharmaceutical product been prescribed for so many patients in so short a time. In addition, more than 450 studies presenting new data related to Motrin have been published.

The 6,000,000 patients already treated with Motrin is an objective measure of physicians' confidence in the ability of Motrin to relieve the pain and inflammation associated with rheumatoid arthritis and osteoarthritis.

So it is not surprising that in this short period Motrin has become the most frequently prescribed alternative to aspirin. Motrin relieves joint pain and inflammation as effectively as indomethacin or aspirin, but causes significantly fewer CNS and milder GI reactions. However, gastrointestinal bleeding, sometimes severe, has been associated with Motrin, aspirin, indomethacin, and other nonsteroidal antiarthritic agents.

*The safety and effectiveness of Motrin have not been established in patients with Functional Class IV rheumatoid arthritis (incapacitated, largely or wholly bedridden, or confined to wheelchair; little or no self-care).

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# Motrin 400 mg TABLETS
ibuprofen, Upjohn

The confidence that comes from experience—
one more reason to prescribe Motrin.

Please turn page for a brief summary of prescribing information.

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I-6857-4

The confidence that comes from experience—
one more reason to prescribe

# Motrin 400 mg TABLETS
ibuprofen, Upjohn

**Indications and Usage:** Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

**Contraindications:** Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

**Warnings:** Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

**Precautions:** Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

**Drug interactions.** *Aspirin* used concomitantly may decrease Motrin blood levels. *Coumarin:* Bleeding has been reported in patients taking Motrin and coumarin.

**Pregnancy and nursing mothers:** Motrin should not be taken during pregnancy or by nursing mothers.

**Adverse Reactions**

*Incidence greater than 1%*

**Gastrointestinal:** The most frequent type of adverse reaction occurring with Motrin (ibuprofen) is gastrointestinal (4% to 16%). This includes nausea*, epigastric pain*, heartburn*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness*, headache, nervousness. **Dermatologic:** Rash* (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

Incidence: Unmarked 1% to 3%; *3% to 9%.

*Incidence less than 1 in 100*

**Gastrointestinal:** Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

*Causal relationship unknown*

**Gastrointestinal:** Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

**Overdosage:** In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

**Dosage and Administration:** Suggested dosage is 300 or 400 mg t.i.d. or q.i.d. Do not exceed 2400 mg per day.

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| **Motrin Tablets, 400 mg** (orange) | |
| Bottles of 60 | NDC 0009-0750-01 |
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| Unit-dose package of 100 | NDC 0009-0750-06 |
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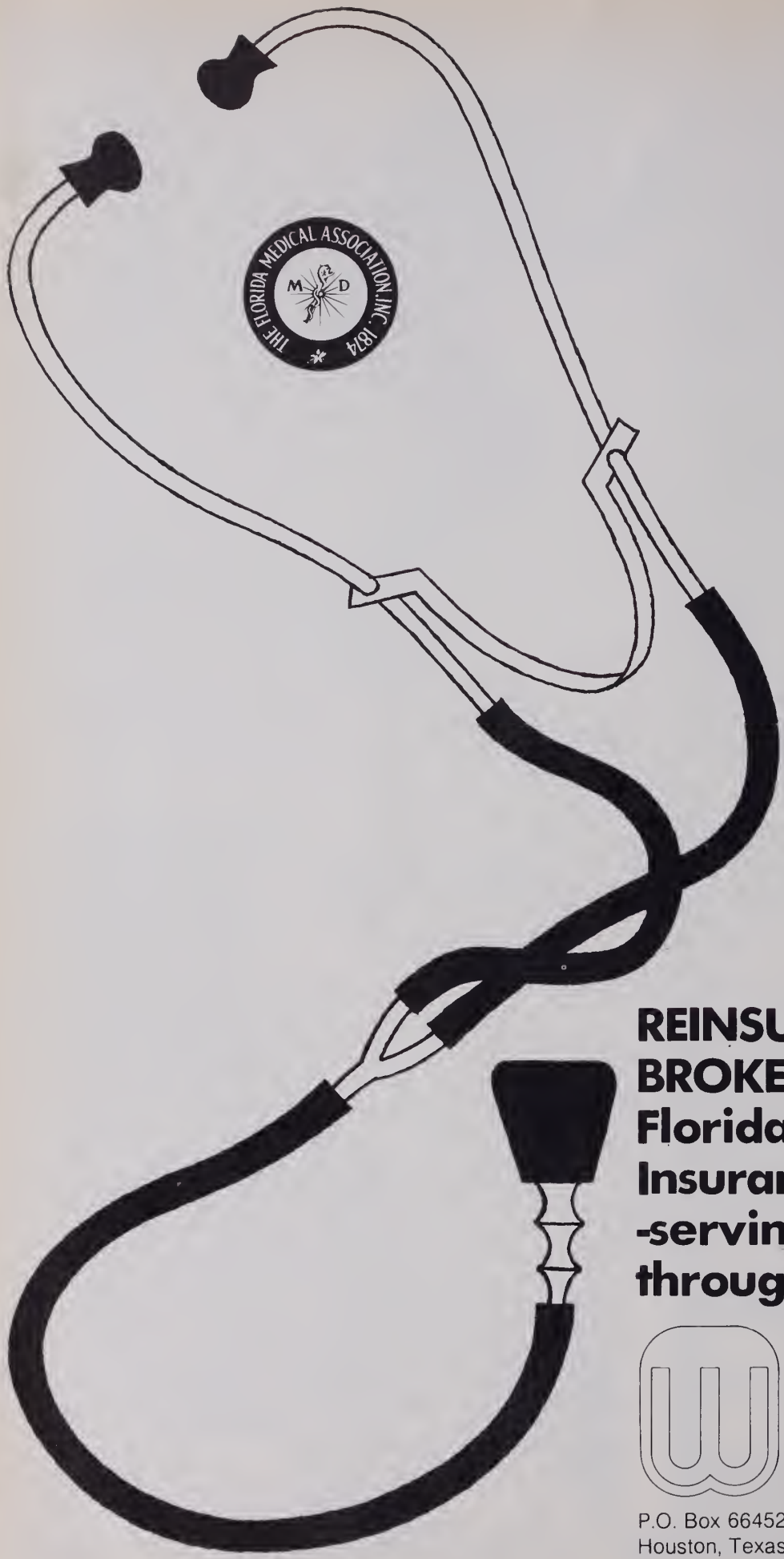


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* * * * *

## A Statement from FMA's President

*We feel that this is an extraordinary publication which will contribute greatly to the education of Florida physicians and medical students alike. It should serve as a valid reference source for many years to come. Our heartfelt thanks to Dr. Barness and all the contributors as well as Dr. Schiebler and Dr. Parham. The latter two made the necessary financial arrangements for the printing of this special issue.*

O. Wm. Davenport M.D.

THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION INC
APRIL 1979 • VOL 66 • NO 4

# Special Issue on Nutrition

## Introduction

## Lewis A. Barness, M.D.
## Guest Editor

The prospect of a long, healthy and happy life is enthralling. Many feel that good nutrition is the path to this goal. Hence, the proliferation of health food stores, food faddists, multiple committees and untold numbers of committee reports.

The officers of the Florida Medical Association determined that this year increased focus be placed on nutritional knowledge; therefore, this issue of the Journal was conceived and the annual program will be devoted largely to nutritional areas. A group of authors have been selected by the editorial board, consisting of Drs. Yank Coble, George Christakis, Donald Macdonald and myself, to address some of the areas of knowledge and to point out some areas of our ignorance. A little nepotism is involved as some of us have also included our own pet topics. Also included is a test to be a pre-test for the annual meeting, the post test to be given at the meeting. If everyone answers all the questions properly before the meeting, more time can be devoted to socializing.

We would like to call attention to many highlights.

Dr. Charles Mahan has written an article of vital importance to all who care for the pregnant and pre-pregnant woman. Following his advice promises to reduce perinatal morbidity and mortality.

The articles on nutritional evaluation and nutritional diseases should be helpful to all who are interested in preventing disease. The importance of relatively new tools for evaluation, such as skin fold thickness and immune responses, are well explained. Cancer, gastrointestinal diseases, surgical and other hospital states, as well as needs for and methods of parenteral nutrition, are excellent reading and learning articles. Fad diets, hyperactivity in relation to the diet, food additives in general, and diet-drug interactions are still controversial, but give the reader information to make his own decisions.

The paper by Dr. Davis, relating other disciplines to humans, can be a source book of nutritional ideas. Public health problems are touched, as well as the successful WIC program.

Nutrition of children is addressed in several articles, including the paper on school lunch programs. Determinants of later disease are discussed in a logical manner.

The physician who has largely an office practice, it is hoped, will be helped not only by these papers, but also

Dr. Barness

**The Author**

*LEWIS A. BARNESS, M.D.*
*Dr. Barness is Professor and Chairman of the Department of Pediatrics, University of South Florida College of Medicine, Tampa. He is a member of the FMA Ad Hoc Committee on Nutrition and Guest Editor of this Issue of* ***The Journal.***

by several excellent papers on how to get nutritional help at home or in the office. More intelligent use of the RDA's is possible from Dr. Harper's explanation.

No promises are made for better life, but reasons for some present diet information are offered. It may seem incongruous to write about deficiencies when the various nutritional surveys indicate that in this country and probably in this state, deficiencies, except for iron, are rare or non-existent (except in association with other diseases). The next leading manifestation of malnutrition in this country is obesity, which requires not only dietary control, but also increasing activity. No one in this issue really addresses this problem of superfluity, but until better information is available, this problem remains relegated to experiment.

Others could have chosen other areas to address, and perhaps another issue of the Journal can be devoted to these problems. For the areas tackled, the editors and authors trust that the information is accurate and will be helpful in preventing waste of food and money, preventing a few diseases and recognizing and treating those that are present, while providing bases for accepting new information as it becomes available.

# Guest Co-Editors of the Special Issue on Nutrition

*YANK D. COBLE JR., M.D.*
*Dr. Coble chairs both the FMA's Council on Scientific Activities and Ad Hoc Committee on Nutrition. A resident of Jacksonville, he specializes in endocrinology and nutrition.*

Dr. Coble

*DONALD I. MACDONALD, M.D.*
*Dr. Macdonald is a pediatrician in practice in Clearwater. He is a member of the Ad Hoc Committee on Nutrition and Committee on School Health.*

Dr. Macdonald

*GEORGE CHRISTAKIS, M.D., M.P.H.*
*Dr. Christakis is chief of the Nutrition Division, Department of Epidemiology and Public Health, University of Miami School of Medicine. He is a member of the FMA Ad Hoc Committee on Nutrition.*

Dr. Christakis

# How to Make a Nutritional Diagnosis Without Really Trying

## A. Adult Nutritional Diagnosis

George Christakis, M.D., M.P.H.

Perhaps no other field in medicine is more annoying—and challenging—to today's practicing physician than nutrition. It is ironic that while it is public knowledge that physicians rarely receive adequate training in nutrition, patients are often walking recipes of unsavory stews of nutrition information and misinformation. While few patients would claim to be experts in the more esoteric aspects of health, the lay press, health food stores and grandma herself repeat old nutrition fables with fervor and periodically invent new ones to keep the physician off guard.

"How do I know I am in good nutritional condition?"

"I feel weak, do I need vitamins?"

"Should I take lecithin for my high cholesterol?"

"Will megavitamins help my son's depression?"

"Won't vitamin E prevent heart attacks?"

It is understandable that when barraged by such questions the physician retreats into the safer role of healer rather than educator. However, nutritional diagnoses are in fact easily missed; it is hoped that this brief outline may serve as a guide to the detection of symptoms and signs of nutritional states in adults.

### Regaining the Lost Art of Nutritional Diagnosis

Nutrition, in common with other aspects of clinical medicine, utilizes the history, physical examination and laboratory to provide the data on which definitive diagnosis is based. Complete nutritional assessment includes (1) dietary history which surveys dietary intakes and patterns (usually over a 24-hour period), (2) interviewing the patient for specific nutrition-related symptoms in the "Review of Systems" which has been neglected, (3) identifying the physical signs of nutritional deficiencies, and (4) utilizing the standard clinical laboratory as well as the nutrition laboratory where available.

Dr. Christakis is Chief, Nutrition Division, Department of Epidemiology and Public Health, University of Miami School of Medicine, Miami.

The nutrition history has a unique advantage in being less threatening to the patient than other parts of the medical history. Patients are often anxious when they visit the office or clinic, especially for the first time. Vital questions such as "Have you coughed up blood?" "Have you noticed any blood in your stool?" or "Have you lost weight?" may put some patients on the defensive because of their ominous and threatening connotations. However the nutrition history poses questions which relate to both the healthy as well as the sick since most of us eat at least three times daily (if not more). Asking the patient, "What do you usually have for breakfast and . . . etc." helps put them at ease. They are often gratified that their doctor thinks enough about nutrition to ask them about their eating habits; it helps "break the ice" and allows the patient to approach the other parts of the medical history with greater ease, and thus perhaps greater truthfulness.

The dietary history has traditionally been an integral component of the medical history, and often documented under "Personal History" with the patient's sleep, smoking and exercise patterns. The hurried physician, however, may not secure a dietary history if he feels it may contribute little to the understanding of the patient, particularly if it does not appear to be related to the chief complaint. Unfortunately, the usefulness of the dietary history is often shrouded by somber warnings from nutritionists that most people cannot remember all they eat (probably true); that conversion from portion sizes to ounces or grams, and utilizing food composition tables to derive macro- and micronutrient composition is riddled with gross inaccuracies (which it is); and finally, that archaic nutritional chemical procedures were used in the first place to obtain nutrient data on food composition (also true).

### Clinical Significance of Dietary History

What then is the value of a nutrition history to the practicing physician? Several useful parameters can be

targeted by even a brief, carefully structured history of eating behavior to provide the physician with clues to not only understanding his patient's nutritional patterns but revealing psychosocial dynamics related to health.

Personality Characteristics—Use of health foods or vegetarianism may provide clues to personal philosophies and lifestyles. The obese person may hide supplies of food or candy to satisfy compulsive eating behavior; in contrast, aversion to food may be a facet of anorexia nervosa. The obese businessman may need to "throw his weight around" as a facade for personal insecurity. A mother may strictly watch her own calories and figure but surreptitiously overfeed her daughter so that she may gain weight and lose in the competition for her father's attention. Rapid weight gain in a child whose parent has died may represent a "reactive obesity," which may assist the child in negotiating this psychic trauma. Teenage obesity in a girl may be a protective barrier against social interaction with boys for which she is not psychologically prepared.

Eating Patterns—Who cooks at home and prepares meals also provides insight into the home environment. Does sibling prepare meals because mother is alcoholic? Are tension-provoking topics discussed at mealtimes? Does husband eat out on pretext of business matters in order to escape conflicts at home? Do food allergies or preferences of other family members adversely affect the patient's diet?

The nutrition history (dietary history and review of nutritional symptoms) fulfills three clinical nutrition objectives:

1. Provides an overview of the patient's food intake and allows the physician to gauge whether there are gross macro- and micronutrient deficits or surpluses.

2. Detects nutritional symptoms associated with a primary nutrient deficiency state, or which may be secondary to another disease. The presence of these symptoms will alert the physician to the possibility of detecting signs of nutrient deficiency states when he examines the patient. Laboratory confirmation may also be required by the determination of serum levels of vitamins, trace minerals, lipids and other tests.

3. Evaluates whether the eating behavior of the patient contributes to a nutritionally determined risk factor of chronic disease. For example, obvious overeating and alcohol abuse can result in obesity and hypertriglyceridemia. Obesity is related to diabetes, osteoarthritis, cancer of the corpus uteri, and is a secondary risk factor in coronary heart disease and hypertension. Chronic high salt intake may also be a factor in hypertension. Low fiber diets appear to be epidemiologically associated with colon carcinoma; high saturated fat diets also may be related to colon and breast cancer.

A dietary history may be obtained, utilizing either the 24-hour dietary history, or the "nutrition scan" which I use in practice. The dietary history simply documents what the patient recalls having eaten in the past 24 hours, noting whether it is representative of the patient's "usual" pattern of eating. If the patient is on a therapeutic diet, taking vitamins or "health foods" and supplements, this should be noted.

What is usually eaten for breakfast? There is the "no breakfast" breakfast characteristic of the obese who may then skip lunch (or have a light lunch), and eat continuously from 6 to 11 p.m. There is the "black coffee and cigarette" breakfast, and the 10:30 a.m. "coffee break" breakfast (i.e., donut-coffee). On weekends, the "cowboy breakfast" is often consumed, consisting of ham, eggs, and pancakes or waffles. There is also the vodka breakfast of the alcoholic "to get the day started." The presence or absence of citrus fruit or juice, a protein source (cheese, eggs or skim milk with cereal) and lipid intake (margarine, butter or cheese) can be quickly outlined. Snacks (soft drinks, pastry, etc.) should also be listed in the dietary history.

As for lunch, is it usually a sandwich or a hot meal? Is alcohol included? What is the dessert? Does he or she eat at the desk or workbench, thus reflecting the nature or extent of on-the-job stresses? Is a walk included after lunch if there is time?

Afternoon snacks should also be listed as well as number of coffee, tea or caffeinated soft drinks consumed (these may trigger cardiac arrhythmias in susceptible persons).

Are alcoholic beverages consumed while waiting for the train or bus home? What foods are eaten at supper and in what approximate portions? How much salt is added during cooking or at the table? Is TV snacking a regular pastime? Is liquor part of saying "good night?" Does the patient wake up at 2 a.m. and attack the refrigerator ("night-eating syndrome")?

The dietary history thus permits a very broad assessment of the nutritional status of the patient. For example, an elderly patient may not have consumed citrus fruits for the past four months because she has lately found them too "acid" in taste; accordingly, it would be prudent to look for perifollicular skin hemorrhages of scurvy. Again, the dietary history may record that a patient eats meat twice daily every day, loves butter and ice creams, and hates fish. The preponderance of foods high in saturated fats should pique the physician's curiosity to order a serum cholesterol level. If a patient eats little whole grain cereals, vegetables and legumes, drinks little water and is sedentary, the lack of dietary fiber may be a clue as to why he is chronically constipated. On the other hand, if the patient with diverticulosis is doing well on a high fiber diet, but

develops occasional abdominal pain when eating vegetables or fruits that contain seeds (squash, eggplant, figs, strawberries), the dietary history will uncover this finding of possible clinical importance.

The nutrition scan outlines the number of meals per week that contain certain food groups and items that have particular relevance to specific nutritional diagnoses. Three questions are asked:

1. How many times a week do you have the following for breakfast in usual portions?
   a. Citrus fruit (oranges, grapefruit, whole or juice).
   b. Whole grain cereals, hot or cold.
   c. Eggs (plain, or with bacon, ham, sausages).
   d. Pancakes, waffles.
   e. Coffee, milk (whole, 2% fat or skim).
2. Of the 14 lunches and dinners you eat a week, how many are of
   a. Beef, lamb, pork or organ meats (liver, heart, kidneys).
   b. Poultry (chicken, turkey or duck).
   c. Fish, shellfish.
3. How many times a week do you eat or drink
   a. Bread, rolls
   b. Vegetables of all types
   c. Cheese
   d. Legumes (peas, beans, chick-peas)
   e. Pasta (spaghetti, noodles)
   f. Fruit
   g. Butter
   h. Margarine
   i. Vegetable oil/salad dressings
   j. Ice cream
   k. Alcoholic beverages (beer, wine, hard liquor)
   l. Snacks (pretzels, potato chips, etc.)
   m. Cookies
   n. Nuts
   o. Raisins
   p. Soft drinks
4. How much water do you drink daily.

The nutrition scan is incomplete and only permits a broad view of the eating pattern of the patient. However, it takes only five minutes and can provide a rough estimate of the following:

1. Adequacy of intake of the six food groups and the major macro- and micronutrients they contain.

2. The relative proportions of saturated, monounsaturated and polyunsaturated fats in the diet.

3. Adequacy of dietary protein with regard to amount and sources from animal and/or vegetable origin.

4. Estimate of whether dietary cholesterol is excessive because of over-intake of eggs, organ meats, red meats, butter, ice cream, cheese.

5. Estimate of whether fiber is adequate through intake of whole grain cereals, vegetables and fruit.

6. Whether snacks and/or alcohol intake are excessive.

## Need for Inclusion of Nutrition Symptoms in "Review of Systems"

Since symptoms from primary or secondary nutritional deficiencies affect many organ systems, the physician may not include them in the Review of Systems or may list only a few under the "metabolic" category when he queries the patient. Table 1 provides examples of symptoms or signs of nutritional states that may be useful in practice, particularly if the physician suspects that the chief complaint may be relevant to a nutritional diagnosis.

Obviously, the symptoms and signs of nutritional deficiency overlap with many other diseases. For example, niacin deficiency and Korsakoff's syndrome in the alcoholic with thiamin deficiency mimic many organic and psychopathic disorders. Subacute combined degeneration of $B_{12}$ deficiency and Wernicke's syndrome may mimic the onset of multiple sclerosis and other demyelinating diseases as well as the organic brain syndromes of cerebral arteriosclerosis.

## Physical Diagnosis of Nutritional Disorders

The examination of the patient begins with inspection as he enters the office or you approach him at the hospital bed.

Do his belt marks reveal progressive weight gain? Do his clothes fit loosely and betray weight loss? Does your strict vegetarian patient have an ataxic gait of subacute combined degeneration of $B_{12}$ deficiency (veganism)? Does the patient present with the obvious pallor of severe anemia? Does your alcoholic patient shuffle into the office because of polyneuropathy due to multiple B vitamin deficiencies? Is your postoperative patient after ten days on IV saline and glucose solutions slowly developing the moon facies of kwashiorkor (protein-calorie malnutrition)? Is his hair lusterless, "staring" or showing signs of horizontal depigmentation (flag sign)? Are the latter third of the eyebrows missing (hypothyroidism)? Does you patient show the neck, upper thorax or arm atrophy of lean muscle mass loss (protein-calorie malnutrition)? Do ill-fitting dentures or dental problems prevent proper chewing or limit the variety of foods habitually eaten by the patient?

The closer inspection of the patient requires skill and patience but if the more detailed and easily missed signs of nutritional deficiency diseases are carefully assessed, the more evident physical signs of other diseases are less likely to be missed.

**Table 1. — Examples of History Questions Related to Nutritional Diagnoses.**

| Symptom | Nutrient Deficiency or Excess to be Considered |
|---|---|
| Hair becomes thin, coarse, falls out or changes colors | Protein |
| Slowed speech, "thickened tongue," dysphagia | Iodine |
| Poor night vision, especially at twilight hours, eyes feel dry | Vitamin A |
| Gums bleed or skin ecchymoses occur easily | Vitamin C |
| Tongue sore, sensitive to hot beverages (due to filiform and/or fungiform atrophy) impaired taste, poor appetite | Nutritional anemias: iron, folic acid, riboflavin, niacin, zinc |
| Lips burn (due to cheilosis) | Thiamin |
| Fatigue, malaise, apathy, mental depression | Nutritional anemias (iron, folic acid), electrolytes (potassium and sodium), protein, hypoglycemia; multiple vitamin (especially B vitamins) and mineral deficiencies |
| Tingling, numbness, "burning" of hands or feet (due to polyneutritis) | Thiamin, Riboflavin |
| Personality changes, hyperexcitability | Niacin; electrolytes, hypoglycemia, magnesium |
| Headache | Hypoglycemia, hypervitaminosis A |
| Blurred vision (optic neuritis) | Alcohol excess, B Vitamin deficiencies |
| Low back pain | Folic acid, B-12 and osteoporosis related to protein, calcium and fluoride deficiencies |
| Exertional dyspnea, congestive heart failure, angina | Hyperlipidemias, aggravation of preexisting coronary heart disease by anemia; thiamin deficiency |
| Dry, scaly skin | Linoleic acid, arachidonic acid |
| Diarrhea | Lactose intolerance, gluten sensitivity, niacin |
| Stools which do not float | Fiber |
| Pica (compulsive eating of ice, earth, laundry starch, wall plaster) | Iron |
| Anorexia | Thiamine, zinc, neoplasms, especially G.I.; onset of anorexia nervosa; depression |
| Fatigue, malaise, lethargy, bone pain, headaches, insomnia, night sweats, loss of hair | Hypervitaminosis A |
| Hypercalcemia and renal damage, anorexia, nausea, weight loss, children: failure to thrive | Hypervitaminosis D |
| Ataxic gait | B-12, Thiamin |

Palpation of the hair may reveal dryness and the easy and painless pluckability of the patient with protein-calorie malnutrition. Does he have the acneiform lesions of vitamin A deficiency? As you pass your hand over the midtriceps area of the arm and "pinch" the skin to gauge the width of subcutaneous fat, can you feel the "shark-skin" (follicular hyperkeratosis) also associated with vitamin A deficiency? The dry, cracked skin of the patient with niacin, linoleic acid, or protein-calorie deficiency should also be palpated. Miliary xanthomatous nodules in the simian creases of the hand are indicative of Type III hyperlipoproteinemia.

The eyelids, conjunctivae, sclera, cornea and optic nerve head may all reveal signs of malnutrition. Xanthelasma at the nasal aspect of the lids, and arcus cornealis, particularly in a young patient, may indicate severe primary Type II hyperlipoproteinemia.

Has the ocular conjunctivae lost its luster and moisture (xerosis of vitamin A deficiency)? Is a small foamy whitish lesion—Bitot's spot—present which is suggestive of vitamin A deficiency? If you're out in rural areas of developing countries and you see a person whose cornea is soft and wiggles when the eye moves, this is a medical emergency. Water soluble vitamin A will be needed immediately to prevent blindness due to corneal ulceration and possible extrusion of the lens.

Is there a fine capillary network of riboflavin deficiency around the cornea? When you evert the lower lid to look for the pallor of iron or folic acid deficiency, can you detect small mounds of mucosal tissue or angular blepharitis suggestive of riboflavin deficiency? Funduscopic examination may reveal the optic neuritis of thiamin deficiency.

The nose and mouth also sensitively reflect micronutrient deficiencies. Nasolabial dyssebacea and seborrhea are seen in riboflavin and pyridoxine deficiencies respectively. Inflammation of the lips (cheilosis) is a common sign of riboflavin deficiency.

The tongue, gums, and teeth also play an important role in nutritional diagnosis. Inflammation of the tongue (glossitis) with atrophy of papillae occurs in iron and/or folate deficiency; hypertrophy of papillae can be seen in riboflavin deficiency. Gums that bleed on pressure and reveal interdental hypertrophy are classical signs of scurvy.

The skeletal and neuromuscular systems also contribute to nutritional diagnosis. Osteoporosis associated with chronic protein, calcium or fluoride deficiency may be patently detectable on x-ray. The sequellae of rickets comprise the thoracic cage "rosary," bowing of the lower legs or craniotabes. Leg and thigh muscle atrophy due to thiamin or protein-calorie malnutrition is commonly seen among the elderly in long-term care institutions. Finally, thiamin, niacin, pyridoxine, protein

deficiencies and nutritional anemias can also induce abnormal behavior or psychotic states.

Table 2 lists the physical signs of specific nutrient deficiency states according to organ systems.

**Table 2. — Physical Signs of Nutrient Deficiencies**

| Organ System | Physical Signs | Nutrient Deficiency |
|---|---|---|
| Hair | Becomes fine, dull, dry, brittle, stiff, straight; becomes red in Blacks, then lighter in color; may be "bleached" in Whites ("flag sign"); is easily and painlessly pluckable; outer one third of eyebrow may be sparse in hypothyroidism (cretinism, iodine deficiency or other causes) | Protein-Calorie |
| Nails | Ridging, brittle, easily broken, flattened, spoon shaped, thin, lusterless | Iron |
| Face | Brown, patchy, pigmentation of cheeks<br>Parotid enlargement<br>"Moon Face" | Protein-Calorie |
| Eyes | Photophobia; poor twilight vision; loss of shiny, bright, moist appearance of eyes; xerosis of bulbar conjunctivae; loss of light reflex; decreased lacrimation; keratomalacia (corneal softening), corneal ulceration which may lead to extrusion of lens; Bitot's spot (frothy white or yellow spots under bulbar conjunctivae) | Vitamin A |
| | Palpebral conjunctivae are pale | Iron or Folate |
| | Circumcorneal capillary injection with penetration of corneal limbus. | Riboflavin |
| | Tissue at external angles of both eyes which is red and moist. Angular blepharitis (or palpebritis) | Riboflavin<br>Pyridoxine |
| | Optic neuritis | B-12 |
| Nose | Nasolabial dyssebacea (exfoliation, inflammation, excessive oil production and fissuring of sebaceous glands, which are moist and red). May be found at angles of eyes, ears or other sites | Riboflavin |
| | Nasolabial seborrhea | Pyridoxine |
| Lips | Cheilosis, inflammation of the mucus membranes of the lips and the loss of the clear differentiation between the mucocutaneous border of the lips | Riboflavin |
| Gums | Interdental gingival hypertrophy | Vitamin C |
| | Gingivitis | Vitamin A, Niacin<br>Riboflavin |
| Mouth | Angular stomatitis; cheilosis; angular scars | Riboflavin |
| | Apthous stomatitis | Folic Acid |
| Tongue | Atrophic lingual papillae, sore, erythematous | Iron |
| | Glossitis, painful, sore | Folic Acid |
| | Magenta in color, atrophic lingual papillae; filiform and fungiform papillae hypertrophy | Riboflavin |
| | Scarlet; raw; atrophic lingual papillae; fissures | Niacin |
| | Glossitis | Pyridoxine |
| Teeth | Caries | Fluoride |
| | Mottled enamel, fluorosis | Fluoride (excessive) |
| | Caries | Phosphorus |
| | Malposition; hypoplastic line across upper primary incisors; becomes filled with yellow-brown pigment; caries then occurs and tooth may break off | Protein-Calorie |
| Neck | Neck mass (goiter) | Iodine |
| Skin | Xerosis (dryness of skin)<br>Follicular hyperkeratosis ("gooseflesh," "sharkskin," sand-paper skin;" keratotic plugs arising from hypertrophied hair follicles. Acneiform lesions | Vitamin A |
| | Perifollicular petechiae which produce a "pink-halo" effect around coiled hair follicles. Intradermal petechiae, purpura, ecchymoses due to capillary fragility. Hemarthroses; cortical hemorrhages of bone visualizable on x-ray | Vitamin C |
| | Intracutaneous hemorrhages; GI hemorrhage | Vitamin K |
| | Pallor | Iron, folic acid |
| | Pallor; icterus | B-12 |
| | Erythema early, vascularization, crusting, desquamation. Increased pigmentation (even in Blacks), thickened, inelastic, fissured, especially in skin exposed to sun; becoming scaly, dry, atrophic in intertrigenous areas, maceration and abrasion may occur. "Necklace of Casals" in neckline exposed to sun; Malar and supraorbital pigmentation | Niacin |
| | Edema (pitting), "Flaky paint: dermatosis, Hyperkeratosis or "Crazy pavement" dermatosis<br>Hyperpigmentation | Protein-Calorie |
| | Scrotum Dermatitis, erythema, hyperpigmentation | Niacin |
| Vulva | Vulvovaginitis and chronic mucocutaneous candidiasis | Iron |

| | | |
|---|---|---|
| Skeletal | Osteoporosis (in association with low protein intake and fluoride deficiency) | Calcium |
| | Epiphyseal enlargement, painless. Beading of ribs ("Rachitic Rosary"). Delayed fusion of fontaneles, craniotabes. Bowed legs, frontal or parietal bossing of skull. Deformities of thorax (Harrison's Sulcus, pigeon breast). | Vitamin D |
| | Osteomalacia (adults) | |
| | Subperiosteal hematoma. Epiphyseal enlargement, painful | Vitamin C |
| Muscular | Hypotonia | Vitamin D |
| | Muscle wasting; weakness, fatigue, inactivity; loss of subcutaneous fat | Protein-Calorie |
| | Intramuscular hematoma | Vitamin C |
| | Calf muscle tenderness; weakness | Thiamin |
| Central Nervous System | Apathy (kwashiorkor); irritability (marasumus); Psychomotor changes. | Protein |
| | Hyporeflexia; foot and wrist drop. Hypesthesia; parasthesia | Thiamin |
| | Psychotic behavior (dementia) | Niacin |
| | Peripheral neuropathy, symmetrical sensory and motor deficits, especially in lower extremities. Drug resistant convulsions (infants). Dementia, forgetfulness | Pyridoxine |
| | Areflexia. Extensor plantar responses. Loss of position and vibratory sense. Ataxia, paresthesias | B-12 |
| | Tremor, convulsions, behavioral disturbances | Magnesium |
| Liver | Hepatomegaly (fatty infiltration) | Protein-Calorie |
| Gastro-intestinal | Anorexia, flatulence, diarrhea | B-12 |
| | Diarrhea | Niacin, Protein-Calorie |
| Cardio-vascular | Tachycardia, congestive heart failure (high output type), Cardiac Englargement, electrocardiographic changes | Thiamin |

## Role of Laboratory in Nutritional Diagnosis

Automated laboratory determinations commonly used in community hospitals can provide clues to nutritional diagnosis. The Wintrobe indices such as the mean corpuscular volume (MCV) may be only slightly elevated yet suggest the macrocytic anemia of folic acid. The mention of a few microcytes or cells with pale centers may suggest iron deficiency. Hypersegmented neutrophils is often another sign of folic acid deficiency that may be easily missed in a perusal of laboratory data.

The serum albumin and blood urea nitrogen level is almost routinely obtained but not always accurately interpreted. They are both key laboratory criteria of malnutrition. Serum albumin values under 3.0 gm/dl and low BUN or blood sugar values should always include protein-calorie malnutrition in their differential diagnosis.

Table 3 summarizes specific micronutrient of functional enzyme determinations which are valuable in nutritional diagnosis. Not all may be available in hospital or commercial laboratories.

**Table 3. — Current Guidelines for Criteria of Nutritional Status for Laboratory Evaluation.**

| Nutrient and Units | Age of Subject (years) | Criteria of Status: Deficient | Marginal | Acceptable |
|---|---|---|---|---|
| *Hemoglobin (gm/dl) | 6-23 mos. | Up to 9.0 | 9.0- 9.9 | 10.0+ |
| | 2-5 | Up to 10.0 | 10.0-10.9 | 11.0+ |
| | 6-12 | Up to 10.0 | 10.0-11.4 | 11.5+ |
| | 13-16M | Up to 12.0 | 12.0-12.9 | 13.0+ |
| | 13-16F | Up to 10.0 | 10.0-11.4 | 11.5+ |
| | 16+M | Up to 12.0 | 12.0-13.9 | 14.0+ |
| | 16+F | Up to 10.0 | 10.0-11.9 | 12.0+ |
| | Pregnant (after 6+ mos.) | Up to 9.5 | 9.5-10.9 | 11.0+ |
| *Hematocrit (Packed cell volume in percent) | Up to 2 | Up to 28 | 28.30 | 31+ |
| | 2-5 | Up to 30 | 30-33 | 34+ |
| | 6-12 | Up to 30 | 30-35 | 36+ |
| | 13-16M | Up to 37 | 37.39 | 40+ |
| | 13-16F | Up to 31 | 31-35 | 36+ |
| | 16+M | Up to 37 | 37-43 | 44+ |
| | 16+F | Up to 31 | 31-37 | 33+ |
| | Pregnant | Up to 30 | 30-32 | 33+ |
| *Serum Albumin (gm/dl) | Up to 1 | — | Up to 2.5 | 2.5+ |
| | 1-5 | — | Up to 3.0 | 3.0+ |
| | 6-16 | — | Up to 3.5 | 3.5+ |
| | 16+ | Up to 2.8 | 2.8-3.4 | 3.5+ |
| | Pregnant | Up to 3.0 | 3.0-3.4 | 3.5+ |
| *Serum Protein (gm/dl) | Up to 1 | — | Up to 5.0 | 5.0+ |
| | 1-5 | — | Up to 5.5 | 5.5+ |
| | 6-16 | — | Up to 6.0 | 6.0+ |
| | 16+ | Up to 6.0 | 6.0-6.4 | 6.5+ |
| | Pregnant | Up to 5.5 | 5.5-5.9 | 6.0+ |
| *Serum Ascorbic Acid (mg/dl) | All ages | Up to 0.1 | 0.1-0.19 | 0.2+ |
| *Plasma vitaminA (mcg/dl) | All ages | Up to 10 | 10-19 | 20+ |
| *Plasma Carotene (mcg/dl) | All ages | Up to 20 | 20-39 | 40+ |
| | Pregnant | — | 40-79 | 80+ |

*Adapted from the Ten State Nutrition Survey
**Criteria may vary with different methodology.

| | | | | |
|---|---|---|---|---|
| *Serum Iron (mcg/dl) | Up to 2 | Up to 30 | — | 30+ |
| | 2-5 | Up to 40 | — | 40+ |
| | 6-12 | Up to 50 | — | 50+ |
| | 12+M | Up to 60 | — | 60+ |
| | 12+F | Up to 40 | — | 40+ |
| *Transferrin Saturation (percent) | Up to 2 | Up to 15.0 | — | 15.0+ |
| | 2-12 | Up to 20.0 | — | 20.0+ |
| | 12+M | Up to 20.0 | — | 20.0+ |
| | 12+F | Up to 15.0 | — | 15.0+ |
| **Serum Folacin (ng/ml) | All ages | Up to 2.0 | 2.1-5.9 | 6.0+ |
| **Serum vitamin $B_{12}$ (pg/ml) | All ages | Up to 100 | — | 100+ |
| *Thiamin in Urine (mcg/g creatinine) | 1-3 | Up to 120 | 120-175 | 175+ |
| | 4-5 | Up to 85 | 85-120 | 120+ |
| | 6-9 | Up to 70 | 70-180 | 180+ |
| | 10-15 | Up to 55 | 55-150 | 150+ |
| | 16+ | Up to 27 | 27- 65 | 65+ |
| | Pregnant | Up to 21 | 21- 49 | 50+ |
| *Riboflavin in Urine (mcg/g creatinine) | 1-3 | Up to 150 | 150-499 | 500+ |
| | 4-5 | Up to 100 | 100-299 | 300+ |
| | 6-9 | Up to 85 | 85-269 | 270+ |
| | 10-16 | Up to 80 | 70-199 | 200+ |
| | 16+ | Up to 27 | 27- 79 | 80+ |
| | Pregnant | Up to 30 | 30- 89 | 90+ |
| **RBC Transketolase-TPP-effect (ratio) | All ages | 25+ | 15- 25 | Up to 15 |
| **RBC Glutathione Reductase-FAD-effect (ratio) | All ages | 1.2+ | — | Up to 1.2 |
| **Tryptophan Load (mg Xanthurenic acid excreted) | Adults (Dose: 100 mg/kg body weight) | 25+(6 hrs.) | — | Up to 25 |
| | | 75+(24 hrs.) | — | Up to 75 |
| **Urinary Pyridoxine (mcg/g creatinine) | 1-3 | Up to 90 | — | 90+ |
| | 4-6 | Up to 80 | — | 80+ |
| | 7-9 | Up to 60 | — | 60+ |
| | 10-12 | Up to 40 | — | 40+ |
| | 13-15 | Up to 30 | — | 30+ |
| | 16+ | Up to 20 | — | 20+ |
| *Urinary N'methyl nicotinamide (mg/g creatinine) | All ages | Up to 0.2 | 0.2-5.59 | 0.6+ |
| | Pregnant | Up to 0.8 | 0.8-2.49 | 2.5+ |
| **Urinary Pantothenic Acid (mcg) | All ages | Up to 200 | — | 200+ |
| **Plasma vitamin E (mg/dl) | All ages | Up to 0.2 | 0.2-0.6 | 0.6+ |
| **Transaminase Index (ratio) | | | | |
| †EGOT | Adult | 2.0+ | — | Up to 2.0 |
| ‡EGPT | Adult | 1.25+ | — | Up to 1.25 |

| Nutrient and Units | Age of Subject (years) | Criteria of Status Deficient | Marginal | Acceptable |
|---|---|---|---|---|

| Nutrient and Units | Age of Subject (years) | Criteria of Status Deficient | Marginal | Acceptable |
|---|---|---|---|---|

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†Erythrocyte Glutamic Oxalacetic Transaminase
‡Erythrocyte Glutamic Pyruvic Transaminase

## Nutritional Evaluation of Obese Patient

Because obesity is so common (approximately 10-15% in adolescents and 30-50% in adults) and is such an exasperating clinical problem for the patient and his physician, the following questions as part of the nutrition history may be useful in delineating pathogenic factors involved:

1. Are/were the mother and father of the patient obese?

   There is a 40% chance of obesity if one parent is obese, 80% if both.

2. Did the obesity originate in childhood; if so at what age and concurrent with what possible major life event?

   "Reactive" obesity of childhood which occurs at the time of some major event (e.g. death of a parent) may well continue through childhood.

3. Has the patient gained or lost weight in a cyclical fashion? What diets or medications have been tried?

   Crash diets, improper and unsupervised fasting and inappropraite "protein-sparing" diets require special nutritional evaluation.

4. How does the weight of the patient appear to correlate with the dietary and physical activity history?

   Onset of "middle-age" obesity usually gradual and associated with decreased activity.

5. Was the weight gain associated with marriage or pregnancy?

   In one series, 29% of women became obese at such times. Men also gain weight at the time of marriage.

6. What is the duration of the obesity?

   There may be an inverse relationship between duration and successful weight reduction.

7. Does the patient use food to negotiate psychologically stressful situations?

Psychogenic factors are frequently related to excessive caloric intake.

The laboratory examination plays a particularly significant role in the nutritional evaluation of the obese patient. As long as the patient is obese, why not take advantage of the fact that obesity may provoke or be associated with certain metabolic abnormalities?

Laboratory or clinical determinations which may be useful include:

1. Complete blood count and serum iron to exclude polycythemia and iron deficiency.
2. One hour postprandial blood sugar level, or glucose tolerance test to rule out "chemical" diabetes.
3. Serum cholesterol, HDL and LDL cholesterol and serum triglycerides, as hypertriglyceredemia or hyperlipoproteinemias Types IIb, III, IV and V may be associated with obesity.
4. $T^3$-$T^4$ levels to exclude hypothyroidism.
5. Uric acid to exclude gout.
6. Insulin levels which may be elevated in prediabetic obese individuals.

Pulmonary function studies and resting or treadmill exercise electrocardiograms may also yield valuable clues to early respiratory or coronary dysfunction.

### Summary

In summary, many nutritional deficiency states are common and easily missed, particularly in their early stages. The physician has the opportunity to learn new diagnostic skills or hone those learned in the past by probing for signs and symptoms of nutritional deficiencies.

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# How to Make a Nutritional Diagnosis Without Really Trying

## B. Pediatric Nutritional Diagnosis


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Optimal nutrition is necessary in maintaining good health which oftentimes is compromised by pediatric diseases. Optimal nutritional status can be considered more essential for the fetus, infant, child and adolescent than it is after growth has been completed. Evaluation of nutritional status at these vulnerable ages can provide valuable clinical assistance in the treatment of acute disease, assist in evaluating growth and development, and provide a possible basis for the prevention of chronic disease later in life. It is well known, for example, that various nutritional disorders act synergistically with infectious disease.[1, 2] Therefore, correction of malnutrition may diminish the incidence and severity of several categories of infectious diseases. Evaluation of nutritional status will also provide very important information regarding the risk factors for chronic diseases such as coronary heart disease, hypertension, diabetes and cancer of the colon.

The process of the evaluation of nutritional status is often inadequately considered in pediatric practice despite its indisputable usefulness. It is also common to observe laboratory data routinely ordered in pediatric clinics or wards which indicate serious nutritional problems, but remain unrecognized or are not followed up. These laboratory data have special significance to pediatric practice in the United States where gross nutritional deficiencies are not common but borderline or subclinical malnutrition may be endemic in many low socioeconomic areas. On the other hand, over-nutrition and obesity is epidemic in many ethnic and socioeconomic groups in the United States.


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Nutritional problems likely to occur in children are dental caries, obesity, vitamin A, vitamin C, folic acid and pyridoxine deficiency, iron deficiency, hypercholesterolemia and trace mineral deficiencies.[3,4] Severe malnutrition including protein-calorie malnutrition may also occur as a consequence of child abuse or in the failure-to-thrive infant and child.

Besides the effects of severe malnutrition on physical growth during prenatal life and early infancy, its effect on brain cell multiplication and subsequently on psychomotor development has been well established. Behavioral disorders, hyperactivity, short attention span, and other psychological and neurological problems may be related, at least in part, to the suboptimal nutritional status of the fetus and infant. Priority, therefore, has to be given in utilizing all available means for early and accurate evaluation of the nutritional status of the infant and child.

In assessing the nutritional status of children, these methodologies are used: (1) dietary, (2) anthropometric measurements, (3) clinical evaluation, and (4) laboratory measurements.

## Dietary Methodology

The dietary history should be particularly useful in children who exhibit abnormal growth and development. However, even in the well-baby clinic, an evaluation of the caloric and nutrient intake will orient practicing physicians to subclinical nutritional deficiencies. For example, in a one-year-old child who consumes only evaporated or skimmed milk, it can be anticipated that iron-deficiency anemia will develop. Anemia can be detected clinically by pallor only if the hemoglobin is very low, i.e. less than 9 gm/dl. It is, therefore, helpful to recognize this condition by utilizing the dietary history. Questions can be asked related to iron content of the milk. If sugar is added to milk and bottle feeding is continued after the first year, dental caries are to be expected. In cases of the failure-to-thrive syndrome, careful evaluation of caloric intake and the percentage of calories from every macronutrient may reveal dietary omissions of the mother. Determining whether the diet contains adequate variety of foods and evaluation of child-feeding practices, such as pica, assists in establishing the diagnosis.

However, the practicing physician often does not have enough time for a detailed dietary history so that he can translate food consumption information into types and amounts of nutrients with the use of food composition tables. A detailed calculation of nutrient intake is not required for every child. However, a child with retarded growth needs a careful evaluation of caloric and major nutrient intake such as protein, vitamin A and iron.

For rapid caloric and nutrient evaluation, food composition tables of the most commonly used foods are included (Appendix A). Qualitative information concerning adequacy of the child's diet can be obtained by asking about the frequency of intakes from all six food groups. These groups include protein-rich foods such as meat, fish, poultry; cereal grains, dairy products, vegetables, fruits and fats and oils. For routine pediatric dietary evaluation, a diet history form is available in Tables 1 and 2. The 24-hour dietary recall is the most frequently used and the most rapid method of assessing food intake. It is particularly useful for persons whose daily fluctations of food intake is minimal, which is likely to be the case in infants. This method does not indicate trends in eating habits; however, in combination with weekly or monthly frequency of foods consumed, this can result in a realistic assessment of nutrient intake. Consecutive 24-hour dietary recalls every two weeks during clinic visits of children with inadequate growth and nutritional problems may reveal trends in their eating habits.

## Anthropometric Measurements

Body size, as assessed by weight and skinfold thickness, is closely related to food intake and utilization from the time of conception to the geriatric period. The rapid increase of body size of the fetus, infant, child and adolescent requires frequent and accurate evaluation. This will determine whether caloric and nutrient intake is adequate for normal growth and development. It is therefore necessary for every pediatrician to undertake pediatric anthropometric measurements and subsequently to compare them with standards derived from the same population.[6]

The most practicable and easily obtainable anthropometric measurements are the weight, length or height, head circumference, arm circumference, midarm and subscapular skinfold thickness.[5,7] (Appendices B and C). Measurements obtained are plotted on growth charts. To use the chart, one plots points that represent the child's age on the horizontal axis and the weight or length on the vertical axis (Appendix B). If individual measurements taken at one point in time are plotted in a group of children, a pattern of growth achievement for the group can be determined. Plots of measurements of children having low birthweight may be misleading if plotted against the reference growth chart, particularly during the first year of life because commonly used growth charts are based on full-term infants. If, for example, 45% of the children in a group fall below the 25th percentile of the reference chart for body length instead of the expected 25% nutritional problems are likely to exist. Important determinants of anthropometric measurements are sex, birthweight and socioeconomic status of the families.

The interpretation of anthropometric findings in an infant or child should be based on serial observations

rather than single measurements at one point in time. Two measurements over a defined period of time permit calculation of growth. Although it is recognized that weight and height of the normal infant and child do not necessarily progress in a uniform fashion along well-defined channels, the extent to which serially-made measurements may differ independently and simultaneously from such channels has never been determined. There are marked differences in rates of growth at various ages. Therefore, susceptibility of a child to nutritional deprivation will vary at different ages, but is always greater during periods of more rapid growth.

Weight should be measured to the nearest 10 g for infants or 100 g for children. The scale should be calibrated every few months using reference weights. The measurements of length require great care in order to assess the linear growth of the child.

Length or height correlates better with socioeconomic status than does weight. It is not usually affected by short-term nutritional deficits and is, therefore, valuable in indicating long-standing nutritional deficiencies. Length is usually taken for children up to 36 months of age and height thereafter.

Head circumference is a good index of brain growth. It is usually taken from infants and children as a screening test for microcephaly and macrocephaly.[7]

Skinfold thickness indicates the caloric reserve of the individual. Decreased skinfold thickness (less than 5 mm) suggests protein-calorie malnutrition and excessive thickness indicates obesity (Table 3). The measurement of skinfold thickness utilizing calipers correlates well with ultrasonic and electrical conductivity measurement of adipose tissue as well as with total body fat. This measure is superior to weight for age and weight-for-height in assessing obesity.[8, 9]

The left mid-arm circumference is another convenient method to quantitate muscle development and fatness. Muscle circumference is calculated by subtracting skinfold measurements from arm circumference which indicates muscle size. Protein-calorie malnutrition and negative nitrogen balance induces muscle wasting and decreased muscle circumference.

## Clinical Evaluation

Clinical nutritional evaluation should be an integral part of the physical examination. It is not time consuming because general problems such as apathy, irritability, pallor, edema, obesity or emaciation are easy to detect. Specific clinical signs of primary hypovitaminoses or trace mineral deficiencies are not commonly seen in the United States but are frequently found in children of developing nations. Every practicing physician should be familiar, however, with clinical signs of malnutrition because secondary malnutrition from malignancies, gastrointestinal diseases, kidney, liver, central nervous system diseases and others are commonly seen in hospitalized children.

**Table 1. — Dietary Intake by food group/frequency of consumption in a 1-week period.**

Check the column which indicates number of times child eats foods in each group, for period of one week:

| Food Group | Hardly ever or never | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 7 specify |
|---|---|---|---|---|---|---|---|---|---|
| Milk (any kind) cheese or yogurt | | | | | | | | | |
| Beef, pork, sausage | | | | | | | | | |
| Chicken | | | | | | | | | |
| Fish | | | | | | | | | |
| Eggs | | | | | | | | | |
| Legumes | | | | | | | | | |
| Fruits | | | | | | | | | |
| Vegetables | | | | | | | | | |
| Bread, crackers, rice, macaroni, spaghetti, noodles, cereals, potatoes | | | | | | | | | |
| Candy, soft drinks, chocolate, jam, jellies, syrup | | | | | | | | | |

Adapted from Christakis, G.: Nutritional Assessment in Health Programs, Am. J. Public Health, 63, November 1973.

The effects of intrauterine malnutrition are more difficult to recognize. Low birthweight babies were considered to be premature. There are available today objective means for the accurate estimation of gestational age based on clinical criteria and not on the last menstruation.[10] The estimated gestational age and birthweight will define the precentile in which the newborn's weight is located (Appendix D).

Newborns subjected to intrauterine malnutrition are substantially below the 10th percentile on the growth chart. They have paper-thin skin-folds and are irritable from hypoglycemia and/or pyridoxine deficiency; convulsions may therefore occur. Small-for-gestational age babies may be due to endogenous (placental abnormalities) or exogenous (maternal malnutrition) factors. They also exhibit increased risk of perinatal asphyxia, polycythemia, hypothermia, congenital malformations, chronic intrauterine infections and massive pulmonary hemorrhage. In a similar way, preterm infants are predisposed to a large number of special risks including hyaline membrane disease, recurrent apnea, infection, hypoglycemia, hypothermia, hyperbilirubinemia, necrotizing enterocolitis, and intraventricular hemorrhage.

APPENDIX A

## TABLE OF NUTRITIVE VALUES OF THE EDIBLE PART OF FOODS[1]

(Dashes show that no basis could be found for computing a value although there was some reason to believe that a measurable amount of the constituent might be present.)

| Food, approximate measure, and weight (in grams) | Approx. Measure | Grams | Water | Calories | Protein* | Fat* (Total lipid) | Fatty Acids* Saturated | Unsaturated Oleic | Unsaturated Linoleic | Carbo-* hydrate | Calcium | Iron | Vitamin A | Thiamine | Riboflavin | Niacin | Ascorbic Acid |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | % | | gm. | gm. | gm. | gm. | gm. | gm. | mg. | mg. | I.U. | mg. | mg. | mg. | mg. |
| **MILK, CREAM, CHEESE; RELATED PRODUCTS** | | | | | | | | | | | | | | | | | |
| Milk, cow's: | | | | | | | | | | | | | | | | | |
| Fluid, whole (3.7% fat) | 1 cup | 244 | 87 | 161 | 9 | 9 | 5 | 2 | Trace | 12 | 285 | Trace | 366 | .07 | .41 | .2 | 2 |
| Fluid, nonfat (skim) | 1 cup | 246 | 90 | 88 | 9 | Trace | — | — | — | 12 | 295 | Trace | Trace | .10 | .44 | .2 | 2 |
| Cheese: | | | | | | | | | | | | | | | | | |
| Cheddar | 1 oz. slice | 28 | 37 | 113 | 7 | 9 | 5 | 3 | Trace | 1 | 213 | .3 | 372 | Trace | .13 | Trace | 0 |
| Cottage creamed | 1 cup | 225 | 78 | 239 | 31 | 10 | 5 | 2 | Trace | 7 | 212 | .7 | 383 | .07 | .56 | .2 | 0 |
| Ice cream, vanilla | 1 scoop | 71 | 62 | 147 | 3 | 9 | 5 | 3 | Trace | 15 | 87 | .1 | 369 | .03 | .13 | .1 | 1 |
| **EGGS** | | | | | | | | | | | | | | | | | |
| Raw, whole | 1 med | 50 | 74 | 78 | 6 | 6 | 2 | 3 | Trace | Trace | 26 | 1.1 | 562 | .04 | .12 | Trace | 0 |
| **MEAT, POULTRY, FISH, SHELLFISH; RELATED PRODUCTS** | | | | | | | | | | | | | | | | | |
| Beef, cooked: | | | | | | | | | | | | | | | | | |
| Rump Roast: Choice grade | | | | | | | | | | | | | | | | | |
| Lean and fat | 4 oz | 113 | 48 | 268 | 18 | 21 | 10 | 10 | 1 | 0 | 8 | 2.4 | 39 | .05 | .14 | 3.3 | 0 |
| Lean only (visible fat removed at table) | 4 oz | 113 | 60 | 120 | 17 | 6 | 3 | 3 | Trace | 0 | 7 | 2.2 | 11 | .04 | .13 | 3.0 | 0 |
| Loin chop | 1 thin slice | 68 | 55 | 113 | 13 | 6 | 2 | 3 | 1 | 0 | 6 | 1.7 | 0 | .48 | .14 | 2.9 | 0 |
| Lamb, cooked: | | | | | | | | | | | | | | | | | |
| Roast leg, choice grade | 4 oz | 113 | 54 | 206 | 19 | 14 | 8 | 5 | Trace | 0 | 8 | 1.2 | 0 | .11 | .20 | 4.0 | 0 |
| Veal, cooked: | | | | | | | | | | | | | | | | | |
| Cutlet, medium fat | 3 oz | 85 | 60 | 235 | 28 | 13 | 6 | 5 | Trace | 0 | 9 | 3.6 | 0 | .10 | .27 | 5.4 | 0 |
| Chicken, cooked: | | | | | | | | | | | | | | | | | |
| Fryer, ¼ whole, med. | | 85 | 54 | 255 | 38 | 10 | 3 | 5 | 1 | 0 | 15 | 2.3 | 215 | .08 | .45 | 12 | 0 |
| Fish, cooked: | | | | | | | | | | | | | | | | | |
| Swordfish, broiled | 3½ oz | 100 | 65 | 174 | 28 | 6 | — | — | — | 0 | 27 | 1.3 | 2,050 | .04 | .05 | 10.9 | 0 |
| Tuna, packed in oil | ½ cup | 115 | 61 | 223 | 33 | 9 | 3 | 2 | 2 | 0 | 9 | 2.1 | 91 | .05 | .13 | 13 | — |
| Shrimp | 4 oz | 113 | 70 | 132 | 28 | 1 | — | — | — | Trace | 130 | 3.5 | 68 | .01 | .03 | 2.0 | — |
| Bacon, broiled or fried | 2 slices | 14 | 8 | 96 | 4 | 7 | 2 | 4 | 1 | Trace | 2 | .4 | 0 | .08 | .04 | .8 | 0 |
| Frankfurter, cooked | 1 med | 51 | 58 | 152 | 6 | 14 | — | — | — | 1 | 3 | .8 | — | .08 | .10 | 1.3 | — |
| Liver, calf, broiled | 4 oz | 113 | 51 | 221 | 33 | 7 | — | — | — | 4 | 15 | 16.1 | 37,114 | .27 | 4.73 | 19 | 42 |
| **VEGETABLES AND VEGETABLE PRODUCTS** | | | | | | | | | | | | | | | | | |
| Asparagus, cooked | 1 cup | 181 | 94 | 36 | 4 | Trace | — | — | — | 7 | 38 | 1.1 | 1,629 | .29 | .33 | 2.5 | 47 |
| Beans: | | | | | | | | | | | | | | | | | |
| Lima, cooked | 1 cup | 166 | 71 | 164 | 10 | Trace | — | — | — | 32 | 33 | 2.8 | 382 | .12 | .08 | 1.7 | 28 |
| Snap, green, cooked | 1 cup | 125 | 92 | 31 | 2 | Trace | — | — | — | 7 | 63 | .8 | 675 | .09 | .11 | .6 | 15 |
| Baked, with tomato, molasses | 1 cup | 187 | 76 | 309 | 14 | 8 | 2 | 2 | Trace | 45 | 134 | 4.8 | 148 | .16 | .09 | 1.4 | 2 |
| Beets, cooked | 1 cup | 167 | 91 | 52 | 2 | Trace | — | — | — | 12 | 23 | .8 | 33 | .05 | .07 | .5 | 10 |
| Broccoli, cooked | 1 cup | 164 | 91 | 43 | 5 | 1 | — | — | — | 7 | 144 | 1.3 | 4,100 | .15 | .33 | 1.3 | 148 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cabbage: | | | | | | | | | | | | | | | | | |
| Coleslaw, raw | 1 cup | 120 | 83 | 119 | 1 | 9 | 1 | 2 | 5 | 10 | 52 | .5 | 180 | .06 | .06 | .4 | 35 |
| Cooked | 1 cup | 146 | 94 | 29 | 2 | Trace | — | — | — | 6 | 64 | .4 | 190 | .06 | .06 | .4 | 48 |
| Carrots, cooked, diced | 1 cup | 160 | 91 | 50 | 1 | Trace | — | — | — | 11 | 53 | 1.0 | 16,800 | .08 | .08 | .8 | 10 |
| Cauliflower, cooked | 1 cup | 125 | 93 | 28 | 3 | Trace | — | — | — | 5 | 26 | .9 | 75 | .11 | .10 | .8 | 69 |
| Celery, raw | 1 stalk | 40 | 94 | 5 | Trace | Trace | — | — | — | 1 | 12 | .1 | 72 | .01 | .01 | .1 | 3 |
| Corn, sweet | | | | | | | | | | | | | | | | | |
| Cooked | 1 ear | 100 | 73 | 91 | 3 | 1 | — | — | — | 21 | 3 | .6 | 400 | .12 | .10 | 1.4 | 9 |
| Canned | 1 cup | 169 | 81 | 140 | 5 | 2 | — | — | — | 32 | 5 | 1.0 | 676 | .19 | .17 | 2.2 | 12 |
| Cucumbers, raw, whole | 1 small | 100 | 96 | 15 | 1 | Trace | — | — | — | 3 | 25 | 1.1 | 250 | .03 | .04 | .2 | 11 |
| Lettuce, leaf | 1 med | 10 | 94 | 2 | Trace | Trace | — | — | — | 1 | 4 | .1 | 59 | .01 | .01 | .1 | 1 |
| Mushrooms, canned | 1 cup | 161 | 93 | 31 | 2 | Trace | — | — | — | 6 | 13 | 1.3 | Trace | .03 | .39 | 3.2 | — |
| Onions, cooked | 1 cup | 197 | 92 | 57 | 2 | Trace | — | — | — | 13 | 47 | .8 | 79 | .06 | .06 | .4 | 14 |
| Parsnips, cooked | 1 cup | 211 | 82 | 139 | 3 | 1 | — | — | — | 31 | 95 | 1.3 | 63 | .15 | .17 | .2 | 21 |
| Peas, cooked | 1 cup | 160 | 82 | 114 | 9 | 1 | — | — | — | 20 | 32 | 3.2 | 1,002 | .45 | .15 | 2.8 | 22 |
| Peppers, sweet, green | 1 shell | 62 | 93 | 13 | 1 | Trace | — | — | — | 3 | 5 | .4 | 239 | .05 | .05 | .3 | 73 |
| Potatoes, medium: | | | | | | | | | | | | | | | | | |
| Baked, peeled | 1 potato | 99 | 75 | 93 | 3 | Trace | — | — | — | 21 | 9 | .7 | Trace | .10 | .04 | 1.7 | 20 |
| Peeled, boiled | 1 potato | 122 | 83 | 79 | 2 | Trace | — | — | — | 18 | 7 | .6 | Trace | .11 | .04 | 1.5 | 20 |
| French-fried | 10 pieces | 57 | 45 | 156 | 2 | 8 | 2 | 2 | 4 | 21 | 9 | .7 | Trace | .07 | .05 | 1.8 | 12 |
| Mashed with milk and margarine | 1 cup | 195 | 80 | 183 | 4 | 8 | 4 | 3 | Trace | 24 | 47 | .8 | 332 | .16 | .10 | 2.0 | 18 |
| Potato chips | 10 med | 20 | 2 | 114 | 1 | 8 | 2 | 2 | 4 | 10 | 8 | .4 | Trace | .04 | .01 | 1.0 | 3 |
| Pumpkin, canned | 1 cup | 228 | 90 | 75 | 2 | 1 | — | — | — | 18 | 57 | .9 | 14,590 | .07 | .11 | 1.4 | 11 |
| Radishes | 4 small | 40 | 94 | 7 | Trace | Trace | — | — | — | 1 | 12 | .4 | 4 | .01 | .01 | .1 | 10 |
| Sauerkraut, canned | 1 cup | 188 | 93 | 34 | 2 | Trace | — | — | — | 8 | 68 | .9 | 94 | .06 | .08 | .4 | 26 |
| Spinach, cooked | 1 cup | 180 | 92 | 46 | 6 | 1 | — | — | — | 7 | 186 | 4.4 | 16,200 | .14 | .28 | 1.0 | 56 |
| Squash, summer, cooked, diced | 1 cup | 136 | 96 | 19 | 1 | Trace | — | — | — | 4 | 34 | .5 | 530 | .07 | .11 | 1.1 | 14 |
| Sweet potatoes, baked | 1 potato | 110 | 64 | 169 | 3 | 1 | — | — | — | 39 | 48 | 1.1 | 9,720 | .11 | .08 | .8 | 26 |
| Tomatoes, raw | 1 med | 120 | 94 | 25 | 1 | Trace | — | — | — | 5 | 15 | .6 | 1,021 | .07 | .05 | .8 | 26 |
| Tomato juice, canned | 1 cup | 242 | 94 | 47 | 2 | Trace | — | — | — | 11 | 17 | 2.2 | 1,976 | .12 | .07 | 2.0 | 40 |
| **FRUITS AND FRUIT PRODUCTS** | | | | | | | | | | | | | | | | | |
| Apples, raw | 1 med | 150 | 85 | 64 | Trace | 1 | — | — | — | 16 | 8 | .3 | 99 | .03 | .02 | .1 | 4 |
| Apple juice | 1 cup | 249 | 88 | 116 | Trace | Trace | — | — | — | 29 | 15 | 1.5 | — | .02 | .05 | .2 | 2 |
| Apricots | | | | | | | | | | | | | | | | | |
| Raw | 1 med | 40 | 85 | 21 | Trace | Trace | — | — | — | 5 | 7 | .2 | 1,134 | .01 | .02 | .3 | 4 |
| Canned | 4 halves; 2 tbsp. syrup | 122 | 77 | 103 | 1 | Trace | — | — | — | 26 | 17 | .5 | 2,777 | .03 | .03 | .6 | 6 |
| Avocados, raw, cubed | ¼ cup | 36 | 74 | 59 | 1 | 6 | 1 | 3 | 1 | 4 | 13 | .2 | 103 | .04 | .07 | .6 | 5 |
| Bananas, raw | 1 med | 150 | 76 | 88 | 1 | Trace | — | — | — | 23 | 8 | .7 | 196 | .05 | .06 | .7 | 10 |
| Blackberries, raw | 1 cup | 144 | 84 | 84 | 2 | 1 | — | — | — | 19 | 46 | 1.3 | 288 | .04 | .06 | .6 | 30 |
| Cantaloupe | ½ med | 385 | 91 | 56 | 1 | Trace | — | — | — | 14 | 26 | .8 | 6,290 | .08 | .06 | 1.1 | 61 |
| Cherries, raw, sweet | 1 cup | 130 | 80 | 108 | 2 | 1 | — | — | — | 27 | 34 | .6 | 169 | .08 | .09 | .6 | 15 |
| Cranberry juice | 1 cup | 250 | 83 | 161 | Trace | Trace | — | — | — | 41 | 12 | .7 | Trace | .02 | .02 | Trace | 99 |
| Fruit cocktail, canned | 1 cup | 229 | 80 | 137 | .1 | Trace | — | — | — | 36 | 21 | .9 | 321 | .05 | .02 | 1.1 | 5 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **GRAIN PRODUCTS** | | | | | | | | | | | | | | | | | |
| Breads, rolls, etc. | | | | | | | | | | | | | | | | | |
| Biscuit, baking powder | 1 (2½" diam) | 38 | 27 | 129 | 3 | 6 | 2 | 3 | 1 | 16 | 42 | .6 | Trace | .07 | .07 | .6 | Trace |
| Corn muffin | 1 muffin . . . | 48 | 33 | 141 | 3 | 5 | 2 | 2 | Trace | 21 | 47 | .8 | 135 | .09 | .10 | .7 | Trace |
| White bread, enr. | 1 slice. . . . . | 23 | 36 | 62 | 2 | 1 | — | — | — | 12 | 19 | .6 | Trace | .06 | .05 | .6 | Trace |
| Whole wheat bread | 1 slice. . . . . | 23 | 45 | 56 | 2 | 1 | — | — | — | 11 | 23 | .5 | 0 | .06 | .03 | .6 | 0 |
| Rye bread, light | 1 slice. . . . . | 23 | 36 | 56 | 2 | Trace | — | — | — | 12 | 17 | .4 | 0 | .04 | .02 | .3 | 0 |
| Plain enriched roll | 1 med. . . . . | 38 | 31 | 113 | 3 | 2 | Trace | 1 | Trace | 20 | 28 | .7 | Trace | .11 | .07 | .8 | Trace |
| Hard roll | 1 med. . . . . | 52 | 25 | 162 | 5 | 2 | Trace | 1 | Trace | 31 | 24 | 1.2 | Trace | .14 | .12 | 1.4 | Trace |
| Sweet roll | 1 med. . . . . | 55 | 32 | 174 | 5 | 5 | 1 | 2 | Trace | 27 | 47 | .4 | 39 | .04 | .08 | .4 | Trace |
| Cakes: | | | | | | | | | | | | | | | | | |
| Angel food | 1 (2" sector) | 40 | 32 | 104 | 2 | Trace | — | — | — | 24 | 38 | .1 | 0 | Trace | .04 | Trace | 0 |
| Chocolate, (chocolate frosting) | 1 (2" sector) | 120 | 22 | 407 | 5 | 15 | 6 | 7 | 1 | 70 | 71 | 1.0 | 180 | .04 | .10 | .4 | Trace |
| Fruitcake, dark | 2" sq. . . . . | 30 | 18 | 114 | 1 | 5 | — | — | — | 18 | 22 | .8 | 36 | .04 | .04 | .2 | Trace |
| Cupcake, plain | 1 med. . . . . | 60 | 24 | 204 | 2 | 7 | 1 | 3 | Trace | 34 | 32 | .2 | 74 | .01 | .04 | .1 | Trace |
| Pound cake | 1 slice. . . . . | 30 | 17 | 123 | 2 | 6 | 2 | 3 | Trace | 16 | 12 | .2 | 87 | .01 | .03 | .1 | Trace |
| Doughnuts (cake type). | 1 med. . . . . | 32 | 24 | 125 | 2 | 6 | 1 | 4 | Trace | 16 | 13 | .4 | 26 | .05 | .05 | .4 | Trace |
| Cookies: | | | | | | | | | | | | | | | | | |
| Plain and assorted | 1 cookie . . . | 25 | 3 | 82 | 1 | 3 | — | — | — | 12 | 6 | .1 | 14 | .01 | .01 | .1 | Trace |
| Bar cookie | 1 bar. . . . . | 16 | 14 | 60 | 1 | 2 | — | — | — | 10 | 11 | .2 | 19 | .01 | .01 | .1 | Trace |
| Crackers: | | | | | | | | | | | | | | | | | |
| Graham, plain | 1 sq. . . . . | 7 | 6 | 27 | 1 | 1 | — | — | — | 5 | 3 | .1 | 0 | Trace | .01 | .1 | 0 |
| Saltine, 2" sq. | 2. . . . . | 8 | 4 | 28 | 1 | Trace | — | — | — | 5 | 2 | Trace | 0 | Trace | Trace | Trace | 0 |
| Cereals (prepared): | | | | | | | | | | | | | | | | | |
| Bran flakes (40%) | 1 cup . . . . . | 38 | 3 | 115 | 4 | 1 | — | — | — | 31 | 27 | 1.7 | 0 | .15 | .06 | 2.4 | 0 |
| Corn flakes | 1 cup . . . . . | 28 | 4 | 108 | 2 | Trace | — | — | — | 24 | 5 | .4 | 0 | .12 | .02 | .6 | 0 |
| Corn, wheat, rice flakes | 1 cup . . . . . | 22 | 3 | 88 | 1 | Trace | — | — | — | 20 | 7 | .4 | 0 | .08 | .01 | 1.2 | 0 |
| Puffed wheat | 1 cup . . . . . | 14 | 3 | 51 | 2 | Trace | — | — | — | 11 | 4 | .6 | 0 | .08 | .03 | 1.1 | 0 |
| Rice krispies | 1 cup . . . . . | 28 | 4 | 109 | 1 | Trace | — | — | — | 25 | 13 | .3 | 0 | .09 | — | 1.3 | 0 |
| Shredded wheat | 1 biscuit . . . | 28 | 7 | 99 | 3 | 1 | — | — | — | 22 | 12 | 1.0 | 0 | .06 | .03 | 1.2 | 0 |
| Wheat flakes | 1 cup . . . . . | 28 | 4 | 99 | 3 | Trace | — | — | — | 23 | 11 | 1.2 | 0 | .18 | .04 | 1.4 | 0 |
| Cereals (cooked): | | | | | | | | | | | | | | | | | |
| Cream of wheat | 1 cup . . . . . | 215 | 90 | 103 | 3 | Trace | — | — | — | 21 | 144 | .6 | 0 | .12 | .07 | 1.0 | 0 |
| Oatmeal | 1 cup . . . . . | 236 | 87 | 132 | 5 | 2 | — | — | — | 23 | 22 | 1.4 | 0 | .19 | .05 | .2 | 0 |
| Cereal Products: | | | | | | | | | | | | | | | | | |
| Macaroni, enr. cooked | 1 cup . . . . . | 140 | 64 | 155 | 5 | 1 | — | — | — | 32 | 11 | 1.3 | 0 | .20 | .11 | 1.5 | 0 |
| Noodles, egg, cooked | 1 cup . . . . . | 160 | 70 | 200 | 7 | 2 | — | — | — | 37 | 16 | 1.4 | 112 | .22 | .13 | 1.9 | 0 |
| Rice, white, enriched, cooked | 1 cup . . . . . | 193 | 73 | 210 | 4 | Trace | — | — | — | 47 | 19 | 1.7 | 0 | .21 | .06 | 1.9 | 0 |
| Spaghetti, enr., cooked | 1 cup . . . . . | 160 | 72 | 178 | 5 | 1 | — | — | — | 37 | 13 | 1.4 | 0 | 22 | .13 | 1.8 | 0 |
| **PIES** | | | | | | | | | | | | | | | | | |
| Fruit | 1/7 cut . . . . | 135 | 48 | 343 | 3 | 15 | 4 | 9 | 1 | 51 | 15 | 1.1 | 416 | .11 | .09 | 1.4 | 3 |
| Custard | 1/7 cut . . . . | 130 | 58 | 283 | 8 | 14 | 5 | 8 | 1 | 30 | 125 | 1.2 | 299 | .10 | .25 | .8 | 0 |
| Lemon Meringue | 1/7 cut . . . . | 120 | 47 | 306 | 4 | 12 | 4 | 7 | 1 | 45 | 17 | 1.0 | 204 | .07 | .13 | .6 | 4 |
| Mince | 1/7 cut . . . . | 135 | 43 | 366 | 3 | 16 | 4 | 10 | 1 | 56 | 38 | 1.9 | Trace | .18 | .11 | 1.2 | 1 |
| Pumpkin | 1/7 cut . . . . | 130 | 59 | 274 | 5 | 15 | 5 | 7 | 1 | 32 | 66 | 1.2 | 3,211 | .12 | 18 | 1.3 | Trace |
| **FATS AND OILS** | | | | | | | | | | | | | | | | | |
| Butter | 1 pat. . . . . | 7 | 16 | 50 | Trace | 6 | 3 | 2 | Trace | Trace | 1 | 0 | 230 | — | — | — | 0 |
| Margarine | 1 pat. . . . . | 7 | 16 | 50 | Trace | 6 | 1 | 3 | 1 | Trace | 1 | 0 | 230 | — | — | — | 0 |
| Cooking Fats: | | | | | | | | | | | | | | | | | |
| Lard | 1 Tbsp. . . . . | 14 | 0 | 126 | 0 | 14 | 5 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vegetable fats | 1 Tbsp. . . . . | 13 | 0 | 106 | 0 | 12 | 3 | 8 | 1 | 0 | 0 | 0 | — | 0 | 0 | 0 | 0 |
| Salad Dressings: | | | | | | | | | | | | | | | | | |
| Commercial, mayonnaise type | 1 Tbsp. . . . . | 15 | 41 | 65 | Trace | 6 | 1 | 1 | 3 | 2 | 2 | Trace | 33 | Trace | Trace | Trace | — |
| French | 1 Tbsp. . . . . | 15 | 39 | 72 | Trace | 7 | 1 | 1 | 3 | 2 | 2 | Trace | — | — | — | — | — |
| Mayonnaise | 1 Tbsp. . . . . | 15 | 15 | 93 | Trace | 11 | 2 | 3 | 6 | Trace | 2 | .1 | 36 | Trace | .01 | Trace | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Salad or Cooking Oils: | | | | | | | | | | | | | | | | | |
| Corn | 1 Tbsp. | 14 | 0 | 125 | 0 | 14 | 1 | 4 | 7 | 0 | 0 | 0 | — | 0 | 0 | 0 | 0 |
| Cottonseed | 1 Tbsp. | 14 | 0 | 125 | 0 | 14 | 4 | 3 | 7 | 0 | 0 | 0 | — | 0 | 0 | 0 | 0 |
| Olive | 1 Tbsp. | 14 | 0 | 125 | 0 | 14 | 2 | 11 | 1 | 0 | 0 | 0 | — | 0 | 0 | 0 | 0 |
| Safflower | 1 Tbsp. | 14 | 0 | 125 | 0 | 14 | 1 | 2 | 10 | 0 | 0 | 0 | — | 0 | 0 | 0 | 0 |
| Soybean | 1 Tbsp. | 14 | 0 | 125 | 0 | 14 | 2 | 3 | 7 | 0 | 0 | 0 | — | 0 | 0 | 0 | 0 |
| **SUGARS AND SWEETS** | | | | | | | | | | | | | | | | | |
| Chocolate, plain | 1 oz | 28 | 1 | 147 | 2 | 9 | 5 | 4 | Trace | 16 | 65 | .3 | 77 | .02 | .10 | .1 | Trace |
| Honey | 1 Tbsp. | 21 | 17 | 64 | Trace | 0 | 0 | 0 | 0 | 17 | 1 | .1 | 0 | Trace | .01 | .1 | Trace |
| Jams, jellies, preserves | 1 Tbsp. | 20 | 29 | 55 | Trace | Trace | — | — | — | 14 | 4 | .3 | Trace | Trace | .01 | Trace | 1 |
| Syrup | 1 Tbsp. | 20 | 24 | 58 | 0 | 0 | 0 | 0 | 0 | 15 | 9 | .8 | 0 | 0 | 0 | 0 | 0 |
| Sugar | 1 Tbsp. | 12 | Trace | 46 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | Trace | 0 | 0 | 0 | 0 | 0 |
| **MISCELLANEOUS ITEMS** | | | | | | | | | | | | | | | | | |
| Beer (3.6% alcohol) | 1 bottle | 340 | 92 | 171 | 2 | 0 | 0 | 0 | 0 | 16 | 15 | 0 | 0 | Trace | 11 | .8 | 0 |
| Carbonated beverage | 8 oz | 240 | 90 | 90 | 0 | 0 | 0 | 0 | 0 | 23 | — | — | 0 | 0 | 0 | 0 | 0 |
| Nuts: | | | | | | | | | | | | | | | | | |
| Peanuts, roasted | 1 oz | 28 | 2 | 160 | 8 | 13 | 3 | 6 | 4 | 5 | 10 | .9 | — | .07 | .04 | 5.4 | 0 |
| Peanut butter | 1 Tbsp. | 16 | 2 | 87 | 4 | 7 | 1 | 4 | 2 | 3 | 9 | .3 | — | .02 | .02 | 2.4 | 0 |
| Pizza (cheese) | 1 (5½" pc). | 75 | 45 | 184 | 7 | 5 | 2 | 3 | Trace | 27 | 117 | .7 | 303 | .05 | .13 | .8 | 5 |
| Popcorn with margarine | 1 cup | 28 | 3 | 155 | 2 | 12 | 3 | 7 | 2 | 11 | 5 | .4 | 462 | — | .02 | .3 | 0 |
| Soups, canned: | | | | | | | | | | | | | | | | | |
| Noodle type | 1 cup | 250 | 93 | 68 | 4 | 2 | Trace | 1 | 1 | 8 | 10 | .8 | 113 | .03 | .05 | 1.0 | Trace |
| Tomato | 1 cup | 245 | 90 | 88 | 2 | 3 | — | — | — | 16 | 15 | .7 | 1,005 | .05 | .05 | 1.2 | 12 |

**Table 2. — Diet Evaluation Score Sheet.**

| | Include 1 weekend day | | | Average | Number of servings and serving size | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | CHILD | | | ADOLESCENT | | |
| Food Groups | 1st | 2nd | 3rd | Per day | 1-3 | 4-6 | 7-10 | 11-14 | 15-18 | Difference |
| Milk Group | | | | | | | | | | |
| Milk | | | | | 2/3 c | 2/3 c | 3/4 c | 4/5 c | 4/5 c | |
| Ice Cream | | | | | | | | | | |
| Cheese | | | | | 6 oz | 8 oz | 8 oz | 8 oz | 8 oz | |
| Meat Group | | | | | 2 serv | 2 serv | 2 serv | 2 serv | 2+ serv | |
| Meat, poultry/fish | | | | | 2/3 oz | 3/4 oz | 4/5 oz | 5/6 oz | 5/6 oz | |
| Eggs | | | | | 1 | 1 | 2 | 2 | 2 | |
| Dried beans, peas | | | | | 1/2 c | 3/4 c | 1 c | 1 c | 1 c | |
| Bread/Cereal Group (whole grain or enriched) | | | | | 4 sm ser | 4 serv | 4/5 serv | 5/6 serv | 6/8 serv | |
| Bread | | | | | 1/2 sl | 1 sl | 1 sl | 1 sl | 1 sl | |
| Cereal | | | | | 1/3 c | 1/2 c | 3/4 c | 1 c | 1 c | |
| Fruit & Vegetables | | | | | 4 sm serv | 4/5 serv | 5/6 serv | 6+ serv | 6+ serv | |
| Vitamin C-good source | | | | | 1/4 c | 1 c | 1 c | 1 c | 1 c | |
| Vitamin A-good source | | | | | 2 T | 2/3 wk | 2/3 wk | 2/3 wk | 2/3 wk | |
| Others | | | | | 4 T | | | | | |
| Miscellaneous | | | | | | | | | | |
| Sweets/desserts/snack foods/chips/soft drinks | | | | | | | | | | |
| Butter/margarine | | | | | 0 | 2/3 T | 2/3 T | 4+ T | 4+ T | |
| Recommended Allowances | | | | | | | | | | |
| Calories | | | | | 1300 | 1800 | 2400 | Girls: 2400 Boys: 2800 | Grils: 2100 Boys: 3000 | |
| Protein | | | | | 23 gm | 30 gm | 36 gm | Girls: 44 gms Boys: 44 gms | Girls: 48 gms Boys: 54 gms | |

**Table 3. — Approximate Limits For Mid-Upper Arm Circumference And Triceps Fatfold**

| Age | Mid-Upper Arm Circumference 3rd to 5th Percentile* Cm | Triceps Fatfold 90th to 97th Percentile** Boys | Girls |
|---|---|---|---|
| 0 mos. | 9 | 10 | |
| 3 mos. | 10 | 11 | |
| 6 mos. | 11½ | 12 | |
| 9 mos. | 12 | 13 | |
| 12 mos. | 13 | 14 | |
| 2 yrs. | 13 | 13 | |
| 3 yrs. | 13 | 13 | |
| 4 yrs. | 13½ | 13 | |
| 5 yrs. | 13½ | 13 | |
| 6 yrs. | 14 | 12 | 15 |
| 7 yrs. | 14 | 13 | 16 |
| 8 yrs. | 14½ | 14 | 17 |
| 9 yrs. | 15 | 14 | 18 |
| 10 yrs. | 16 | 16 | 20 |
| 11 yrs. | 16½ | 17 | 21 |
| 12-16 yrs. | 17-20 | 18-20 | 22.25 |

*Under this value suggests undernutrition
**Over this value suggests obesity (values in mm)

Zerfas, A. J. and Neumann, C. G., Office Assessment of Nutritional Status, Pediatric Clinics of North America, 24:253, February 1977.

Post-term babies are also at special risk for perinatal asphyxia, meconium aspiration and pneumothorax. They are characteristically thin with very little subcutaneous fat; the skin is wrinkled and paper-like. Babies born to diabetic mothers are often large for gestational age and at high risk for hyaline membrane disease, hypocalcemia and hyperbilirubinemia. Early diagnosis and aggressive nutritional therapy of these high-risk newborns serve to decrease their perinatal morbidity and mortality.

The diagnosis of infants and children with growth failure should include medical history, physical examination, laboratory tests and roentgenograms to exclude infections or inflammatory diseases of kidneys, central nervous system, cardiovascular and gastrointestinal systems, etc. Attempts should be made to arrive at a definite diagnosis. On the other hand, signs of nutritional disorders in children having surgical or other major illnesses should be promptly recognized and corrected. Hospital malnutrition in children is often iatrogenic and may be associated with serious complications and prolong hospitalization. The prevalence of this problem, unlike that of adult hospital malnutrition, is not currently known.

Protein-calorie malnutrition due to inadequate food intake is not unusual in immigrants arriving from the Caribbean Islands and from South America. It is essential for every physician to know how to detect a child with protein-calorie malnutrition. The child with kwashiorkor is apathetic and disinterested but if disturbed during the examination may become miserable and irritable. Edema is always present in kwashiorkor because of lack of protein in the diet and very low serum albumin. The hair changes in texture and color and is easily pluckable. There is depigmentation of the skin with extensive dermatosis in areas of friction. Diarrhea, parasites, anemia and signs of vitamin and mineral deficiencies may also be present. Growth failure is common in both kwashiorkor and marasmus.

Marasmus, in contrast to kwashiorkor, is due to combined severe deficiency of both protein and calories. In the United States, marasmus can be seen in neglected children. They have severe muscle wasting and very little subcutaneous fat. In contrast to kwashiorkor, marasmic children have good appetites; they are wide-eyed and alert in appearance. Anemia, diarrhea and parasites may also be present.

## Specific Nutrient Deficiencies

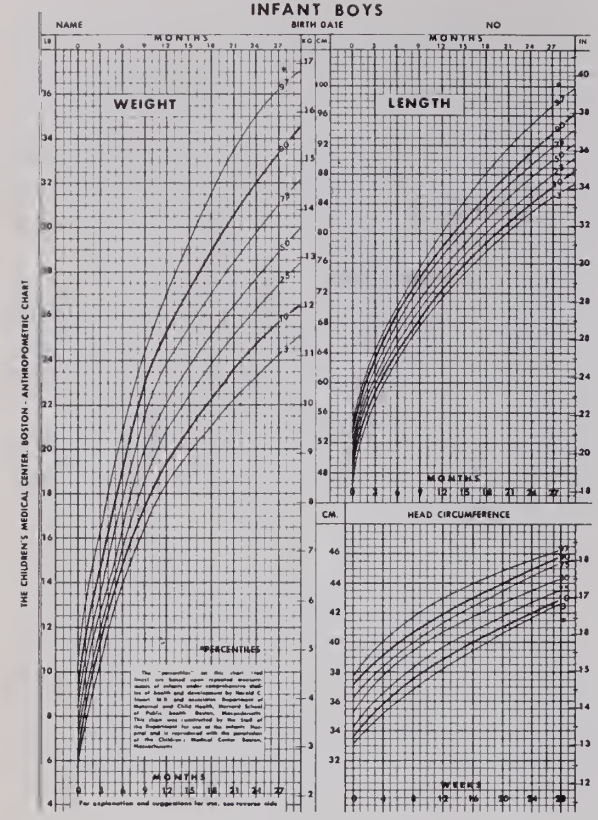
Vitamin A deficiency is among the most prevalent nutritional deficiency in developing countries of the world. In the United States, subclinical vitamin A deficiency may be detected by biochemical means.[4] Vitamin A deficiency involves nearly all organs. Prolonged deficiency causes growth failure; impaired dark adaptation and hyperkeratosis of the skin are among the first clinical signs of deficiency. Dark adaptation is difficult to measure in infants and young children. Other symptoms of vitamin A deficiency include mental retardation, dry and scaly skin, Bitot's spot on the sclera of the eye, and corneal changes that may proceed to ulceration and blindness. Cartilage and bones are often involved in addition to other epithelial and connective tissue; bone formation ceases and bone shape is abnormal.[11]

Excessive doses of vitamin A or 20,000 I.U. or more daily for more than one month are likely to be toxic. Vitamin A toxicity includes anorexia, irritability, increased intracranial pressure, desquamation of the skin, and bone changes.[11]

The child with rickets (vitamin D deficiency) appears to be plump and well fed. He or she tends to be irritable and flabby because of decreased muscle tone. The child is late in reaching developmental milestones such as sitting, standing or walking. There is delay in teeth eruption; swelling of the epiphysis of the bones also occurs which may first be seen at the wrist. A bead-like appearance at the costochondral margin is called "rachitic rosary." Deformities of the chest include Harrison's sulcus and pigeon chest. In infants, craniotabes is often the first sign of rickets. This consists of areas of softening of the skull which usually affect the

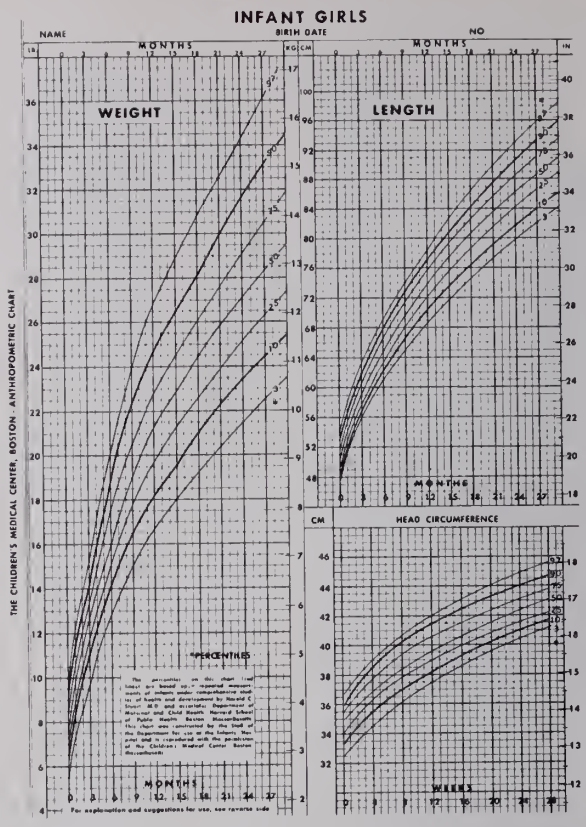
Appendix B

INFANT BOYS



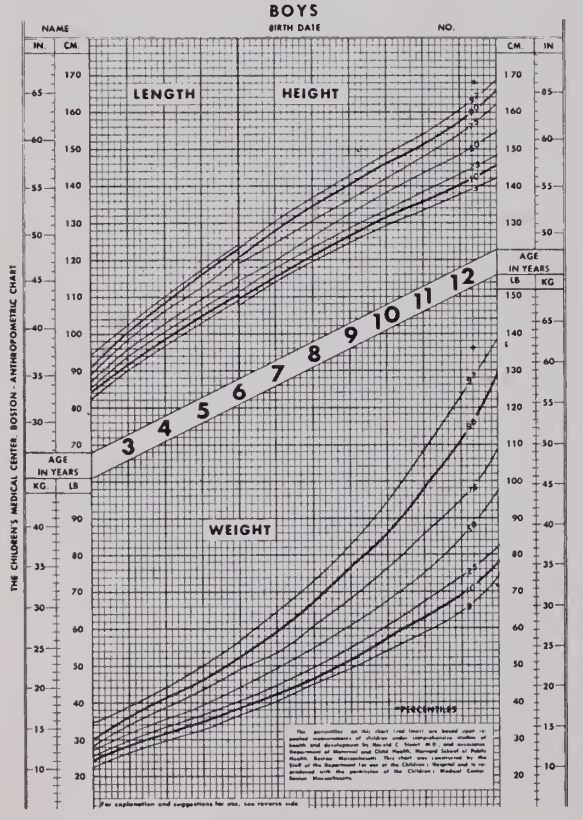

Appendix B (continued)

INFANT GIRLS




Appendix B

BOYS

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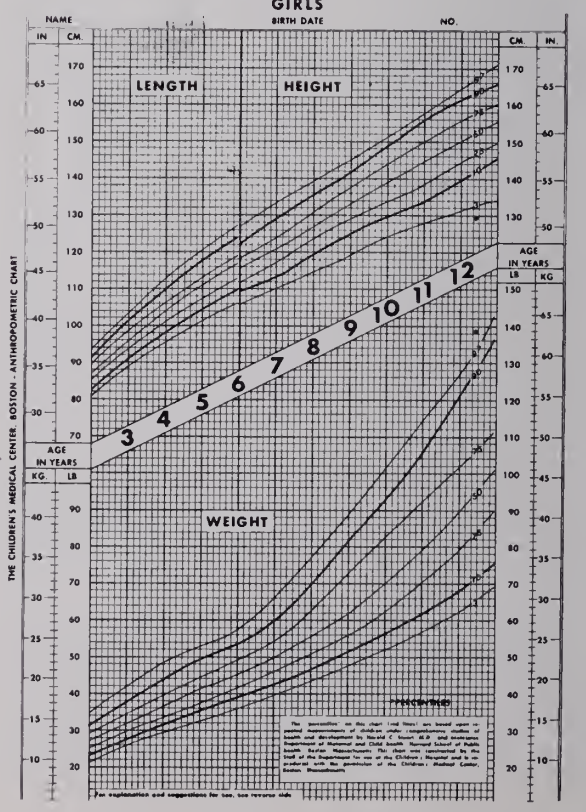
GIRLS



occipital and parietal bones. There is also delayed closure of the anterior fontanel. In advanced rickets, there may be bossing of the skull and bowed leg deformities. Kyphosis is a very serious deformity of the spine and changes in the pelvic bones may result in difficulties in childbirth in girls who had rickets during childhood. Tetany may occur as a result of reduced levels of serum calcium.[12]

Excessive intake of vitamin D causes infantile "idiopathic" hypercalcemia. Vitamin D toxicity follows ingestion of 3000 to 4000 I.U. of vitamin D daily. Symptoms include failure-to-thrive, vomiting, mental retardation, bony changes, elevated concentration of serum calcium, renal failure and hypertension.[12]

Vitamin E deficiency has been found in premature infants and results in increased hemolysis of erythrocytes, which can be reversed by administration of alpha-tocopherol.[13]

Petechial hemorrhages are the earliest clinical signs of vitamin C deficiency. Other symptoms are fatigue, irritability, tenderness of the lower extremities and swelling of joints and gums. Growth retardation and iron deficiency anemia are also common in vitamin C-deficient children. Vitamin C deficiency in premature infants causes transient tyrosinemia which, if untreated, may be related to low I.Q. status later in life. Full-blown clinical manifestations of vitamin C deficiency (scurvy) do not usually occur in infants less than three months of age.

Vitamin B1 or thiamin deficiency is not usually found in American infants and children. Soy-based formulas, not supplemented with thiamin and which serve as the major source of calories for a long period of time, may cause thiamin deficiency. In children in developing countries having inadequate milk intake, thiamin deficiency is common. Severe vitamin B1 deficiency causes beriberi. Infantile beriberi is characterized by dyspnea, cyanosis, cardiac failure and rapid death. In chronic forms, the infant is thin and wasted, diarrhea and vomiting may develop, and the appearance is marasmic. Edema, aphonia and convulsions may occur in the terminal stages.

Vitamin B2 (riboflavin) deficiency of the diet causes hyporiboflavinosis. Symptoms include angular stomatitis, cheilosis, glossitis, and papillary atrophy, vascularization of the cornea, photophobia and lacrimation.

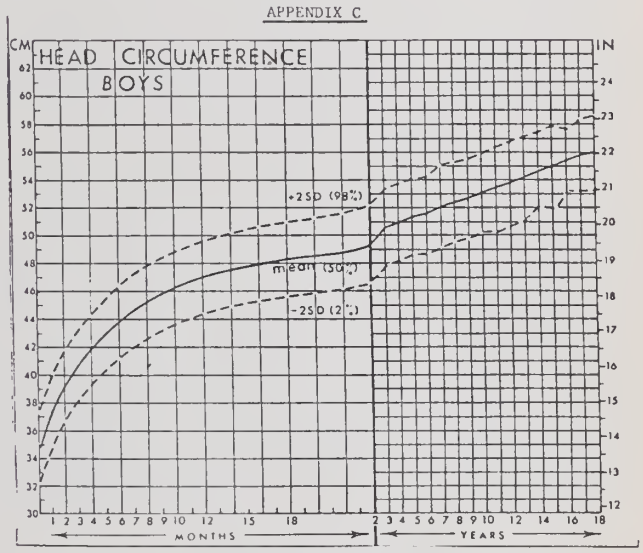
Niacin deficiency (pellagra) is most likely to occur in children with cirrhosis of the liver, chronic diarrhea diseases, diabetes mellitus, neoplasia, prolonged febrile illness and after total parenteral nutrition without niacin supplements. The symptoms of niacin deficiency include abdominal pain, diarrhea, angular stomititis, cheilosis, irritability and skin lesions (erythema, scaly, cracked skin progressing to desquamation).

Vitamin B6 deficiency (pyridoxine) results in convulsive seizures in infants, hyperirritability and anemia.

Folic acid deficiency is responsible for megaloblastic anemia in children and infants on a solely milk diet because milk is deficient in folate.

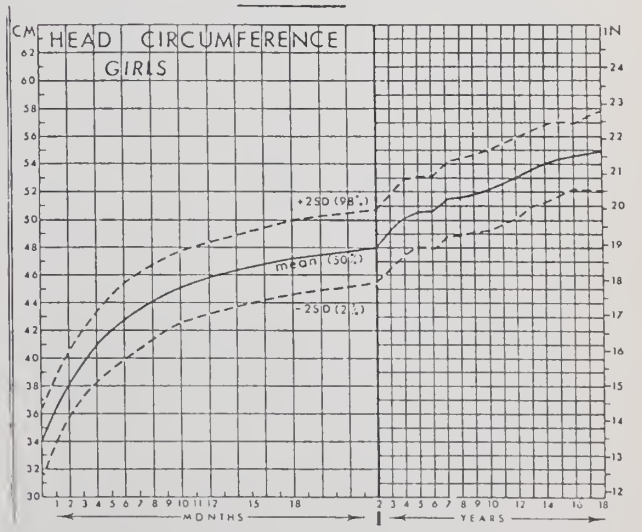
The major minerals, sodium, chlorine, potassium, calcium, phosphorus, magnesium, sulfur and iron, will not be discussed. Most of the trace minerals, however, such as chromium, manganese, cobalt, copper, zinc, molybdenum, iodine, and selenium, are under current investigation. The only manifestation of chromium deficiency thus far documented in human subjects is impaired glucose tolerance.[14] There is no evidence of manganese deficiency in human subjects. Cobalt is an essential nutrient because it is part of vitamin B12. Copper is necessary for the structure and function of

APPENDIX C



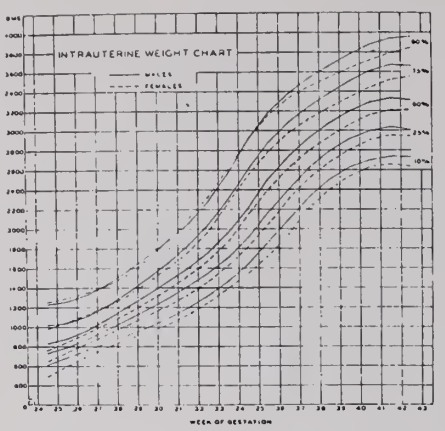

Composite graph for males from birth through 18 years.

APPENDIX C




Composite graph for females from birth through 18 years

APPENDIX D




Percentile Distribution of Birthweight for Gestational Age

various enzymes. Copper deficiency coexists with severe malnutrition associated with bone changes and growth retardation. Copper deficiency causes anemia and has also been described in premature infants.

Dietary deficiency of zinc in infants and children is associated with anorexia, retarded growth, delayed sexual maturation, lymphopenia, and abnormalities in keratinization.[15] Acrodermitis enteropathica is due to severe zinc deficiency as a result of a genetic disorder in zinc metabolism. It is characterized by severe growth retardation and diarrhea, which does not respond to any other therapeutic measure. A characteristic exanthem is almost always present in acrodermitis enteropathica. All symptoms disappear quickly following the administration of zinc 10-20 times above the recommended daily dietary allowances.

## Laboratory Studies

A number of hematological and biochemical measurements are useful in determining nutritional status of infants and children including albumin, hemoglobin, red blood cell indices, serum transferin saturation, serum proteins, serum vitamins and minerals. Homeostatic mechanisms control levels of certain components independently of short-term dietary influences. Such components include hemoglobin, protein, cholesterol, and vitamin A. In contrast, blood levels of water-soluble vitamins, such as ascorbic acid, may fluctuate with dietary intake. These relationships should be taken into account in selecting biochemical determinations to be carried out and in evaluating the results in relation to dietary intake.

Criteria used to establish that a population of children is normal involve the development of standards for that population. Children having values two standard deviations below the mean of the population are considered abnormal. Existing standards of selected measurements are presented elsewhere in this journal.*

Certain biochemical tests such as white blood cell, pyruvate kinase and adenylate kinase may predict fetal malnutrition before the 32nd week of pregnancy. Cord blood total cholesterol and low density lipoprotein cholesterol give an accurate diagnosis of the genetic hypercholesterolemias. As in the adult, skin testing (Candida, PPD) for immune response and decreased lymphocyte count may indicate underlying malnutrition.

## Conclusion

Nutritional adequacy is a basis for the function and growth of every cell in the human body. Over-consumption or under-consumption of nutrients, defects in absorption, excretion or metabolism, may lead to nutritional disorders. Dietary and laboratory methodologies assist in the diagnosis of these nutritional disorders in the preclinical stage for early correction. Advanced nutritional disorders are characterized by specific clinical signs. The use of anthropometry will greatly assist the pediatric nutritional diagnosis in cases of primary or secondary malnutrition.

Finally, a dietary history assessment in every pediatric clinic visit will reveal feeding and eating practices of the child which serve as a nutrition education tool for optimal growth and maintenance of good health.

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# Revolution in Obstetrics: Pregnancy Nutrition

Charles S. Mahan, M.D.

**Abstract: Many changes have occurred in the nutritional management of pregnancy. Women are encouraged to eat balanced diets, to gain weight freely and to salt food to taste. Nutritional problems are thought to underlie many of the diseases that can make pregnancy dangerous such as toxemia, diabetes, obesity and intrauterine growth retardation. Accordingly, the nutritional management of women with these problems has changed dramatically.**

Doctors, nurses, and the people they help take care of have all seemed to develop their own particular, and of times unusual, views of how and what and how much pregnant women should eat. Over the past four decades, theories on feeding pregnant women have jumped from pushing red meat, to no meat, to starvation, and currently to a total reversal of the latter. In the past five years there has been a strong interest developing in all aspects of nutrition by the public and professionals alike. In many areas of medicine, this interest has raised more questions than there are answers available. In this short treatise, I will attempt to contrast the older ideas of the past decade, about some of the more common prenatal nutrition problems, to ideas that have sprung up recently. For more detailed information on these and some of the less common nutrition problems in pregnancy, references 1-4 are good general works to consult.

## Preconception Nutrition

In the past, often the first opportunity the physician had to give nutrition counseling was at the first prenatal visit or perhaps at the time of confirmation of pregnancy when a pregnancy test was done. Today we are encouraging women to make preconception visits to their physicians so that all possible health problems that might influence the pregnancy can be reviewed. This not only serves as a time to screen for any possible genetic problems that the prospective family may have but also serves to review many facets of the person's nutritional status. This would include smoking and alcohol intake, both of which should be stopped before pregnancy begins. Contraceptive techniques that would affect nutrition include the intrauterine device which usually causes increased blood loss during periods and may therefore cause an increased iron loss. Oral contraceptives may decrease the amount of folic acid available in the mother early in pregnancy if they were taken close to the time of conception with no replacement of folic acid by supplements. It is now thought that oral contraceptives should be stopped at least three months before conception not only for nutritional reasons but for teratogenic reasons. Other general aspects of diet and nutrition need to be reviewed at this time including a look at the patient's weight. Women who are overweight may be successful in reducing before pregnancy is attempted but if this is done they should be back on a regular diet the month before they attempt to conceive. Patients who are underweight have the more serious problem as far as a prognosis for pregnancy outcome and should be strongly encouraged to supplement their diet to try to gain enough weight to be within normal range for their height at the time pregnancy begins.

## Maternal Weight Gain

In the past pregnant women were instructed, sometimes in an overbearing fashion, to limit their weight to a total gain of 15-18 lbs during their whole pregnancy. Usually no adjustments were made for the prepregnancy weight and often the obese woman was told to use pregnancy as an opportune time to lose weight. In the past the standard urinalysis done at the time of each prenatal visit included sugar and albumin testing but not testing for ketones.

Now, studies have shown that in general "bigger babies are better babies." Most nutrition experts in the United States have now recommended that the normal weight gain for pregnancy for women of normal height should range between 20-30 lbs. The average weight gain in Scandinavian countries, which have better perinatal outcomes than the United States, is between 30-35 lbs., so we still may be shooting rather low in our country. If people have low prepregnancy weights for their heights

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they are encouraged to gain much more than the average woman in pregnancy.

The ideal weight gain curve in pregnancy is shown in Figure 1. As can be seen from that figure most of the extra calories that need to be taken in and hopefully most of the weight gain will occur in the last two trimesters of pregnancy. This is especially important in the last trimester since much of the brain growth of the new individual will occur in the last three months of intrauterine life and the first three months in the outside world. This makes the brain very vulnerable to malnutrition during this six month period of time.

Ketone testing is usually available on the same dip sticks that are used to test urines at each prenatal visit for sugar and protein. Testing for ketones is important since ketonuria, especially in the third trimester of pregnancy when the brain is most actively growing, is usually a sign of starvation ketosis which may cause direct brain damage.[5]

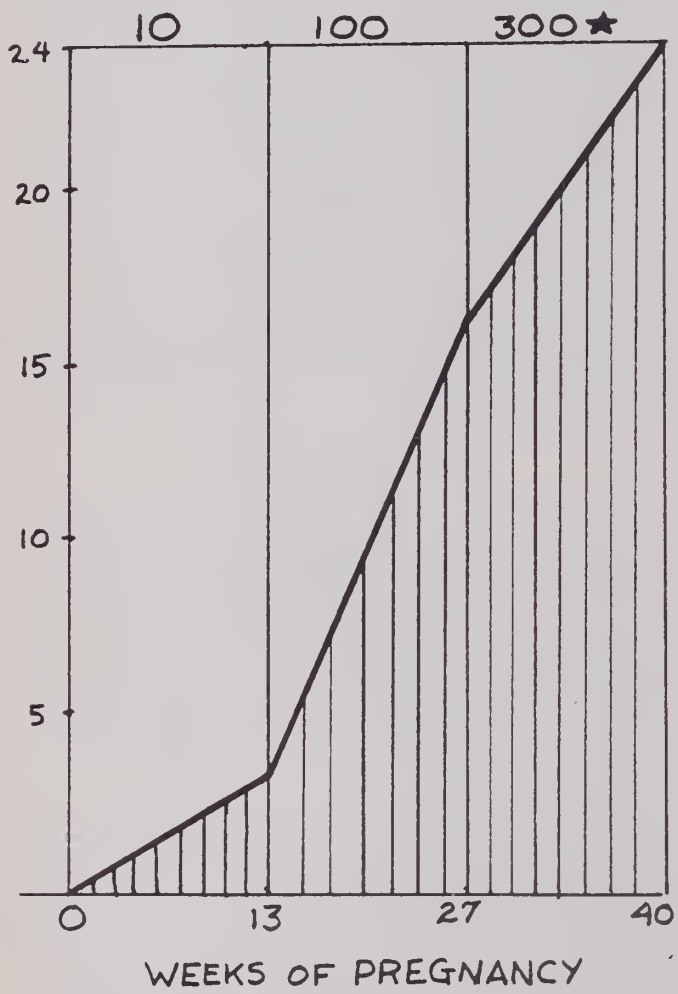


**Fig. 1 — The ideal weight gain curve for pregnancy in a woman of normal height. The star is beside the numbers of extra calories needed per day in each trimester of pregnancy.**

The finding of ketone bodies in the urine should be taken seriously and the mother's diet should be reviewed to be sure that she is not missing meals and is taking in adequate amounts of calories. Occasionally hospitalization is mandatory to correct the ketosis through intravenous feedings and to help the mother with her diet under closer observation. The ketone bodies that appear in the urine during the first trimester as a result of nausea and vomiting in pregnancy have not been found to be as important in affecting pregnancy outcome as those later in gestation when brain growth is occurring.

One of the most important topics to be covered at the first prenatal visit with the physician is the expected ideal weight gain during the pregnancy for that particular patient. Using her prepregnancy weight, she should be given a definite range to shoot for, as far as expected weight at the end of the pregnancy. If the patient has any high-risk nutritional problems uncovered at the first prenatal visit or if any develop during the pregnancy, it may be important to refer the patient to a registered nutritionist if the physician does not have time to take a 24-hour recall diet history and do in-depth diet counseling.

## The Teen-Age Mother

In the past, due to her late entrance into the prenatal system, and possibly because of the physicians' fears of the possible development of toxemia, teenagers either have had no nutritional advice or were advised on low salt, low calorie diets.

Recent studies done at the University of Florida College of Medicine have confirmed that most of the pregnancy problems encountered by the young pregnant teenager (those under 16) are either directly or indirectly related to their nutritional status. These teenagers have a much higher incidence of toxemia of pregnancy, premature labor and delivery, and postpartum infections than more mature mothers.[6]

Teenagers bring many problems unique to their age group into a pregnancy. Some of the problems include the fact that many teenage girls are on self-imposed weight loss diets even if their weights are normal for their heights; teenage girls typically eat very little red meat; teenage girls typically eat plenty of junk food. In addition to the tremendous caloric requirements of pregnancy, teenagers also bring into pregnancy the added caloric requirements of their rapid growth at this particular age, so good dietary management is essential to a good outcome for both mother and baby.

Teenagers who are pregnant need special dietary management preferably by a registered nutritionist, but the doctor and nurse are important in emphasizing the importance of proper diet to the teenager since their words often carry more weight to the teenager than the

nutritionist. The nutritionist will often do a diet history by a 24-hour recall of food intake and then outline a nutritious diet for the teenager that takes into account the needs for the particular trimester of pregnancy she is in plus her growth needs. The nutritionist then usually tells the teenager that if she will follow the diet carefully she can eat any junk food she wants on top of the diet. This added touch of liberalism at the end is often what it takes to convince a recalcitrant teenager to take the outlined nutrition program seriously. Because of their rapid growth, teenagers often need foods that are high in vitamins and iron and foods that will supply extra calcium.

Teenagers typically may be deficient in vitamins A, B, C, D and perhaps folic acid. In addition to dietary supplements, it may be important to place teenagers on standard oral preparations of prenatal vitamins with folic acid and oral iron supplementation so they are getting at least 60 mg of elemental iron per day.

### The Obese Mother

In the past many obese women were counseled that pregnancy was a good time to lose weight and some doctors even provided amphetamines to these women to help this weight loss.

On the basis of recent nutritional research, proper management of the obese pregnant woman now includes impressing her with the fact that she should gain at least 25-30 lbs for the pregnancy so that she will keep a good caloric balance and not start breaking down her fats due to starvation with subsequent ketosis. It is stressed to her that her obesity does make her high-risk for other problems during pregnancy such as dystocia, malpresentation hemorrhage, etc., but that it is important to have an excellent nutritional intake for the best fetal outcome and that we will try to help her lose weight when pregnancy and/or lactation is done with. We do encourage these women to breast feed since that has been shown to help women lose weight faster in the postpartum period and we stress to the women that obesity is a form of malnutrition.

### Unusual Diets

Vegans (vegetarians) and their fetuses can get through pregnancy in good health but it may take more effort and more thorough counseling than many doctors are able to give. In these situations it is important for the vegan to get counseling from a registered nutritionist.

If the mother is a strict vegan and takes in no animal-derived foods, she can suffer deficiencies of certain nutrients such as iron, zinc, chromium and vitamin $B^{12}$ (which is not present in plants) which may lead to health problems in herself and her baby.[8] Vitamin and iron supplements may be very important for vegan mothers.

Pica is the regular and excessive ingestion of foods and substances that have no nutritional value. The practices of nibbling on refrigerator freezer ice, red clay, laundry starch, etc., are seen more commonly in poor rural women of the south. Currently, most nutritionists think that pica is a result of iron deficiency (and of course can make it even worse) and is mainly a problem because the abnormal substance ingested ruins the appetite for nutritious foods. Pica is treated by intensive, convincing dietary counseling, stressing outcomes for mother and baby and attempting to change eating habits. Iron and vitamin supplements are usually important in these cases.

### Alcohol and Other Vices

In the recent past we have told women to stop smoking completely in pregnancy and to cut down on their alcohol intake to less than three ounces of whiskey a day with no particular limits on the amount of wine and beer except to avoid becoming drunk.

Recently the medical literature has been flooded with reports outlining the various and sundry horrors of the fetal alcohol syndrome. The problems being discovered in the babies range from severe anomalies to

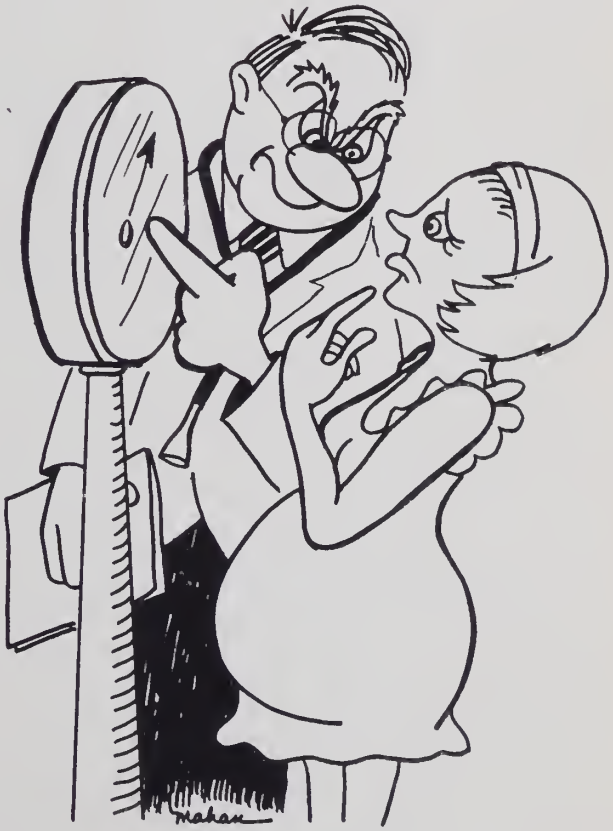


Fig. 2 — The bad old days.

intrauterine growth retardation. The severity of the effects on the baby seems to be related to the amount of alcohol ingested but at the present time there is some concern that any amount of alcohol can cause potential damage at any time in pregnancy. Current advice then is to cut out alcohol intake completely during pregnancy.

Both alcoholics and smokers may, in addition to the direct toxic effects of the substances they are taking in, have a related decrease in appetite and therefore fail to eat. Also, these habits may cause them to spend scarce dollars on cigarettes and whiskey instead of purchasing nutritious foods. Heavy smoking and drinking may also cause problems with the absorption or metabolism of certain important nutrients.

There is some evidence that heavy caffeine intake (over eight cups of coffee per day) can lead to poor pregnancy outcomes.[7]

### Anemias, Iron and Vitamins

One area in which very little has changed over the past ten or 15 years is the area of iron and vitamin supplementation to the pregnant woman. This has become a routine in prenatal care in most parts of the country even though there is still great argument as to whether such supplements are needed for the majority of women.

Most upper middle class women with good incomes and excellent diets who enter pregnancy with no nutritional risk problems and have a normal weight gain throughout pregnancy do not need prenatal vitamins with folic acid supplementation. However, teenagers of all social classes, indigent women and women with nutritional high-risk problems as outlined in this paper should have supplementation with a standard prenatal vitamin preparation with at least 300-500 micrograms of folic acid in it.

Ninety-five percent of all anemias seen in pregnancy are primarily due to iron deficiency. Most anemias are seen in populations of low-income women and since most of these women are being supplemented with prenatal vitamins with folic acid it is a rare event to diagnose a folic acid deficiency anemia in the present day. Iron deficiency in pregnant women can usually be diagnosed, not with expensive laboratory tests, but with a therapeutic trial of oral iron. If oral treatment (which is just as effective as parental iron treatment) slows down or stops a falling hematocrit within 3-4 weeks after beginning administration, that is considered diagnostic of an iron deficiency anemia and no further workup is needed. Because many women have a chronic iron deficit due to reproductive events, menstrual loss, etc., we think it is important for them to stay on low dose iron supplementation for 3-4 months after each pregnancy to build up their reserves. Again this is probably not necessary in people with an entirely normal nutritional history and excellent nutrition intake.

It must continually be stressed to the patient that iron and vitamin supplements, while they may be helpful, are certainly no substitute for a good balanced intake of food.

### Salt Intake, Diuretics and Toxemia

In the past we often gave pregnant women one gram sodium diets at the first sign of any ankle edema in the late second trimester. We also commonly give diuretics to primagravidas to "prevent" preeclampsia. If high blood pressure developed, in spite of our diuretic therapy, we often increased the dosage of diuretics, put the patient on a one-gram sodium diet and were careful to give her no salt in her intravenous fluids when she was hospitalized. As a result we saw many mothers and babies suffering from hyponatremia; the preeclampsia usually stayed the same or got worse; the diuretics occasionally caused platelet problems with subsequent bleeding in the babies and occasionally hemorrhagic pancreatitis in the mother.

Modern obstetric research has still not found the cause of toxemia but it has shown that salt has little or no relationship to the development of preeclampsia. Pregnant women need at least a two-gram sodium intake each day to maintain normal growth for themselves and their babies. We know that ankle and leg edema is a normal physiologic change in pregnancy and this is now treated, if it is bothersome to the mother, with support stockings or bed rest but not with salt restriction or diuretics. Mothers are now advised to salt their food to their taste during pregnancy.

There is some evidence to show that the incidence of toxemia is decreased with better protein and calorie nutrition and that women with good nutrition and adequate weight gain have few cases of toxemia unless chronic hypertension or renal disease preexisted.

Diuretics are presently indicated in pregnancy only for congestive heart failure and other rare problems.

### Mother with Diabetes

In the past, insulin-dependent diabetic mothers were given 1800 calorie ADA diets and it was thought to be safer to manage their insulin so that their blood sugars remained on the high side to avoid insulin reactions. The majority of them were given low salt diets and diuretics to prevent toxemia which was more common in diabetic pregnancies and usually delivery was planned strictly at 37 weeks of gestation.

Currently it is thought that pregnant diabetic women should have at least 2000 to 2200 calories per day in their diets (Table 1). This complicated diet problem should be handled by a registered nutritionist with strong support

by the physician and nurse.

Modern management of diabetes in pregnancy includes "tight" control of food intake and insulin administration so that the woman's blood sugars are kept in the normal range at all times. This avoids two problems that are dangerous to the baby—ketosis and high blood sugar levels. Ketosis as reflected by acetonuria, whether due to fasting and subsequent starvation or to poor control of diabetes, can be damaging to the fetus as mentioned previously. On the other hand, very high levels of glucose in the mother pass freely to the baby across the placenta and cause overgrowth (macrosomia) which can lead to dystocia and/or possible deterioration of fetal status.

Most perinatal centers now deliver diabetic mothers when fetal maturity tests show that the baby can survive outside the uterus. These are balanced against the results of modern methods of monitoring the in-utero well-being of the fetus (nonstress tests, stress tests, HPL, estriol) which may show early fetal deterioration. None of the above technology is as important to successful outcome of the diabetic pregnancy as careful nutritional and insulin mangement. Properly managed, the babies of diabetic mothers should have the same perinatal mortality rate as babies of mothers without diabetes.

### Intrauterine Growth Retardation

In the past, when mothers produced babies that weighed less than 2500 grams at term, people remarked how tough these little wrinkled babies were and how well they survived compared to babies born prematurely at similar weights.

In the past few decades we have learned, to our dismay, that these small, "tough" babies often remain stunted in growth and never catch up. Worse than that, they have a much higher chance than the average size baby of developing mental retardation and severe learning disabilities as they grow older. Intrauterine retardation (IUGR) is much more commonly found in impoverished mothers or women with chronic hypertension. It is important that women in these categories plus women with a past history of IUGR get very early prenatal care which includes help with good diet management. The uterus should be watched and measured carefully for normal growth and if it deviates from the normal growth pattern serial sonograms should be obtained. In addition to eating a regular diet for pregnancy these women, especially if they were underweight for their height prenatally, may benefit from eating canned protein-calorie supplements such as are currently given to patients with advanced malignancies, although no good studies have been done to prove that this is helpful. Bed rest, intrauterine monitoring, and possible early delivery when the fetal lungs are mature are also steps in the modern management of IUGR.

Malnutrition is an important element in intrauterine growth retardation but very often other factors are also involved and must be carefully considered.

**Table 1. — Diet for the Pregnant Diabetic**

2000-2200 calories per day or 35 calories per kg of ideal body weight

| | Percent of total calories |
|---|---|
| Carbohydrates | 45-55 |
| Fats | 25-30 |
| Protein | 20-25 |

| | Percent of total calories |
|---|---|
| Breakfast | 25 |
| Lunch | 30 |
| Dinner | 30 |
| Bedtime snack | 15 |

### The Mother in Poverty

In the past women in poverty often got little or no prenatal care, often had no source of adequate nutrition, and had no access to government programs which would help supplement their diets.

Now, programs for indigent persons such as the North Central Florida Maternal and Infant Care and Adolescent Pregnancy Team Projects have been able to provide resources for prenatal care for indigent women in some parts of the United States. Until 1975 the North Central Florida program still had no way of increasing the nutritional status of those women who needed it (but couldn't afford it) other than by helping them spend what food dollars they had more wisely through nutritional counseling. In mid-1975 our Projects began participating in the U. S. Department of Agriculture's WIC Program (Special Supplemental Food Program for Women, Infants and Children) and in one year we noted an increase in the baby weights of mothers in the participating counties in the program compared to the weights of babies of mothers in counties not participating. Two years after the WIC program started, the perinatal mortality rate of the North Central Florida Projects fell to a new low of eight deaths per 1,000 live births. More detailed studies are underway to try to confirm this relationship but this is typical of findings with WIC programs in other parts of the United States, and of reports on food supplement programs in Canada.

Mothers in poverty are at a much higher risk for most of the nutrition problems mentioned in this article than are upper middle class mothers. Many experts think that elimination of poverty problems would wipe out 80-90% of all high-risk pregnancies. However, since poverty will likely be with us for some time, American obstetrics is starting to reorder its priorities and place more emphasis on this high risk group. The WIC program seems an

important step and deserves the support of the health care professional.

Certainly, people working with low income populations need to be acutely aware of the many subtle and varied health problems that malnutrition may cause in these people. Since many of them are cared for by the public health sector, public health nutritionists are currently in great demand and can be a vital force in correction of many of these problems.

## Diagnosis of Nutritional Problems in Pregnancy

History

1. Short pregnancy interval — less than two years between conception of this pregnancy and last delivery or cessation of breast-feeding.
2. Poor obstetrical history—premature or growth retarded infants, excess pregnancy wastage, etc.
3. Recent use of oral contraceptives, IUD or induced abortion.
4. Present pregnancy: any of problems outlined in above pages plus unwanted pregnancy (may be tipoff to poor motivation) plus any woman planning to breast feed.

Physical Examination

1. Weight—under or over normal range of weight for height. Any deviations during pregnancy from set standards of weight.
2. Skin-fold thickness done with calipers. This can be a useful tool for differentiating caloric vs fluid weight.
3. Height of uterine fundus in centimeters with tape or calipers.
4. Skin turgor and color.

Laboratory

1. Routine hematocrit—every other visit.
2. Blood work to diagnose anemia (Table 2).
3. Urine for sugar and ketones—each visit.
4. Fasting and one hour post-glucose load (50 gram) blood glucose as screen for diabetes.

**Table 2. — Most Valid Tests for Diagnosis of Pregnancy Anemias.**

| | |
|---|---|
| Serum iron less than 40mcg% | |
| Total iron binding capacity (TIBC) | 35mcg% |
| Saturation less than 15% | |
| Serum folate less than 3 nanograms /ml. | |

## Conclusion

As can be learned from the previous discussion, prenatal nutrition is important to the quality of pregnancy outcome. Medical, dental nursing schools and schools of public health are attempting to upgrade their nutrition teaching so that an updated, comprehensive overview of the subject can be presented to the students in an interesting and exciting way so that they in turn can present it to their patients in an interesting and convincing fashion.

If all of this comes about, we can presume that future visits of a woman to her prenatal care-giver will be highlighted by uplifting discussions of the positive aspects of nutrition and its relationship to quality outcome of her pregnancy and not to the old saw: "Oh dear, you've gained over a pound in the last two months, Ms. Svelte! You must stop eating so much!"

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# Nutritional Concepts in the Treatment of Cancer

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Surgery, radiation therapy and chemotherapy predictably increase nutrient requirements and at the same time interfere with the patient's ability to eat. Surveys of protein-calorie malnutrition in major metropolitan hospitals have indicated that 40% of the malnourished patients have cancer.[1] Because of this high incidence, the practicing oncologist must not only recognize the malnourished patient who presents for oncologic therapy and be able to initiate measures to replenish the patient before proceeding with therapy but must also attempt to prevent further nutritional depletion during treatment.

Weight loss in the untreated cancer patient usually can be correlated with a decrease in food intake or a decrease in assimilation of ingested foods. These decreases can be secondary to gastrointestinal tract obstruction, malabsorption or pain, each a result of the anatomical location of the cancer. When cancer is initially diagnosed, patients rarely have lost more than 5% of their body weight since a palpable mass, gastrointestinal symptoms or pain usually stimulate the patient to seek early medical assistance. Consequently, complications of inanition are not often significant problems for patients undergoing initial treatment for cancer. Malnutrition usually results from the intensive effort to eradicate the tumor either by surgery, radiation therapy or chemotherapy. Each of these therapeutic steps is predicated upon recovery from the preceding step and unless adequate nutrient intake is ensured, the patient is at risk for protein-calorie malnutrition. The potential benefits of antineoplastic therapy can be lost because of induced malnutrition.

No doubt, the malignant process does alter host metabolic demands. The theory that malnutrition in the cancer patient results from competition for nutrients between the host and cancer has been supported by clinical observations and experimental results. Patients with oat-cell carcinoma of the lung lose weight rapidly and out of proportion to the volume of malignant tissue. Cancer cells are thought to incorporate and concentrate amino acids and glucose better than normal cells. Once amino acids are within the cancer cell, they apparently are not available for participation in the turnover of the host's amino acid pool (the cancer acts as a "nitrogen trap"[2]). Protein-calorie malnutrition has occurred in tumor-bearing rats even though the animals remained in positive nitrogen balance.[3] The theoretical explanation of this observation was that energy for tumor metabolism was derived from host protein stores through gluconeogenesis, resulting in protein-calorie depletion, and the nitrogen liberated from gluconeogenesis was utilized by the tumor for protein synthesis and thus not available for use by the host's body. Anaerobic glycolysis is thought to predominate in cancer cells because of their enzymatic makeup and limited oxygen supply. The end product of anaerobic glycolysis is lactic acid, and the production of this compound results in lowering of the pH within the tumor environment. The cancer cells have a limited capacity for metabolism of lactic acid, and lactic acid generated from anaerobic glucose metabolism by tumor cells must enter the bloodstream and be resynthesized into glucose by the liver. This recycling process has the potential to produce an energy drain upon the host. Two moles of adenosine triphosphate are liberated by the anaerobic metabolism of glucose by the tumor, but six moles of adenosine triphosphate are required by the host to regenerate glucose from lactic acid.

The concepts of recycling lactate by the host and of trapping nitrogen by the tumor have been used by some investigators to explain the symdrome of cancer cachexia. Although these mechanisms may account for some of the weight loss encountered in cancer patients, the majority of weight loss can be accounted for by a decrease in nutrient intake. The basal metabolic rates for cancer patients do not appear to be elevated; however, the voluntary intake of nutriments does seem to progressively fail to meet nutritional demands as tumor bulk increases.[4] Nevertheless, so long as the cancer patient can ingest adequate nutriments to meet the metabolic demands of both himself and the tumor, host nutritional status will remain relatively normal.

The gastrointestinal tract is the ideal conduit for digesting and assimilating nutrients, but the cancer patient subjected to a wide variety of therapies is often

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unable to take food by mouth. Appetite is poor, absorption is inadequate and pain, nausea and diarrhea make eating a normal diet almost impossible. Nasogastric tube feedings may be successful in some cases, and feeding by gastrostomy tube or jejunostomy tube can restore nutritional status in patients with obstructive lesions of the esophagus, stomach or pancreas. Unfortunately, nutritional supplementation via the gastrointestinal tract can be time-consuming, and the operative insertion of feeding tubes can impose on the patient an acute surgical stress that further delays nutritional restoration. Delivery of adequate nutriments to the gut does not always result in rapid nutritional restoration of the starving patient because malnutrition may have resulted in malabsorption.[5] In the severely malnourished patient, the columnar gastrointestinal mucosal cells become cuboidal, and the brush border is reduced in height. Gastrointestinal motility diminishes and overgrowth of facultative and anaerobic bacteria occurs. Absorption of glucose, protein and fat may be greatly impaired. These morphologic, absorptive and environmental abnormalities are reversible after protein-calorie replenishment, but the process is slow because the enteral nutriments are partially malabsorbed initially. The oncologist needs to replenish the cancer patient as quickly as possible so that oncologic therapy can either be begun or resumed in an attempt to cure the patient or to achieve major palliation.

When the gastrointestinal tract is unavailable for use, a logical alternative is intravenous hyperalimentation (IVH), a established technique of parenteral nutritional support. Vitamins, minerals, amino acids and glucose are provided in amounts necessary to maintain anabolism and reverse negative nitrogen balance. Since 1971, our group has advocated the use of intravenous hyperalimentation for malnourished patients who have malignant lesions potentially responsive to oncologic treatment and who cannot be fed enterally. Cancer patients have been safely and effectively treated with IVH for prolonged periods of time, tumor growth has not been stimulated, the risk of catheter-related sepsis has been negligible when aseptic catheter care techniques were followed carefully, nutritional replenishment has occurred often within 10 to 20 days of initiating IVH and immunocompetence has been restored. Patients can be maintained on IVH during antineoplastic therapy. Morbidity may be reduced, the chance for a favorable response to oncologic therapy is increased, and there is a much greater likelihood that the well-nourished patient will advance to the next stage of oncologic treatment.

## Practical Clues to Diagnosis and Managment of Malnutrition

A set of complex tests are not always necessary for the diagnosis of malnutrition. Nutritional depletion is defined by our team as a recent, unintentional loss of 10 pounds or more of body weight, a serum albumin concentration of less than 3.4 gm%, and/or a negative reaction to a battery of recall skin test antigens. Patients who satisfy two of these three criteria and who have a reasonable chance of responding to appropriate oncologic therapy are candidates for IVH. Similarly, patients who are incapable of adequate enteral nutrition because of the malnutrition imposed by previous oncologic therapy are candidates for nutritional rehabilitation with IVH, and nutritionally healthy patients whose treatment plan necessitates multiple courses of chemotherapy, possibly combined with radiation therapy or surgery, are IVH candidates in order to maintain them in a state of optimum nutrition during therapy, to maximize their chance for response to treatment, and to improve their quality of life. The use of IVH in the group of nutritionally "healthy" patients has allowed the safe delivery of intensive chemotherapy and radiation therapy without weight loss, and major complications have been minimized.

Although weight loss is a good indicator of nutritional status, it can be deceiving. Consider a female patient with gastric carcinoma who weighs 146 pounds on admission to the hospital but weighed 186 pounds three months ago. She has lost more than 10% of her usual body weight during the time interval because pain after eating, nausea and hematemesis have resulted in a reduced food intake, but her weight is still greater than her ideal weight. On evaluation, her serum albumin level is 3.4 gm%. She is a candidate for operation but should she receive preoperative nutritional repletion with intravenous hyperalimentation? In this clinical situation, the third criterion, reactivity to a battery of skin test antigens, becomes important in detecting nutritional status. Malnutrition has been shown to depress cell-mediated immunity.[6] A postivite response to skin tests indicates that this patient has an intact cell-mediated immune response; consequently, nutritional status would be considered adequate, preoperative intravenous hyperalimentation would not be utilized and surgery could be safely undertaken. If skin test responses had been negative, nutritional replenishment preoperatively for at least 7-10 days would be indicated, hopefully until skin test reactivity became positive. Hyperalimentation would then be continued postoperatively until the patient was able to eat normally.

Another example to consider is a women 5'4" tall and weighing 130 pounds, somewhat over ideal weight, who also has a partially obstructing carcinoma of the gastric antrum and has lost 35 pounds in the last four months. Her serum albumin is 3.1 gm% on initial evaluation and her skin test reactions are all negative.

This patient, while of normal weight for her height, is semistarved and at risk for postoperative complications particularly pneumonia, poor wound healing and wound infection. Surgery should be postponed until the patient can be nutritionally replenished with intravenous hyperalimentation. Because of the magnitude of weight loss and the low serum albumin concentration, IVH would still be initiated even if skin test reactions had been positive.

There are many tests for evaluating nutritional status, and most tests for nutritional assessment can be correlated with somatic compartments. For example, the fat compartment can be evaluated by measuring the triceps skin fold thickness, the visceral protein compartment by measuring serum albumin concentration and also by skin testing for delayed hypersensitivity, and the skeletal muscle compartment by measuring upper arm circumference and creatinine-height index. All of these tests are important, but the practicing physician without the aid of an organized nutritional support service cannot always perform all available tests. From the standpoint of practicality, currently we rely on percent weight loss, serum albumin concentration and reactivity to skin test antigens.

Depending upon the patient's initial nutritional status and the magnitude of planned therapy, either maintenance or anabolic levels of calories and protein will be required. A simple way to calculate calorie and protein needs is to supply calories at 35 kcal/kg/day if maintenance levels are necessary or 45 kcal/kg/day if anabolism needs to be promoted. Nitrogen (protein in grams÷ 6.25) should be given in a ratio of about 1 gram per 150 nonprotein calories.

Nitrogen balance studies determine the need for additional protein and calorie intake to offset body protein losses and to meet energy demands. Since amino acids are distinguished from other nutrients by the presence of nitrogen, nitrogen balance is commonly used as a nutritional index. When cumulative nitrogen output exceeds nitrogen input for several days, the patient may become protein-calorie malnourished, but as a single test nitrogen balance cannot assess the nutritional status of the patient.

### Intravenous Hyperalimentation

At many institutions, intravenous hyperalimentation is the responsibility of a team of people including a physician team leader, registered nurses, pharmacists, dietitians and rehabilitation therapists. Solutions for intravenous hyperalimentation generally contain 3.5 to 5% amino acids and 20 to 30% dextrose. The osmolarity of this solution is between 1800-2400 m0sm necessitating infusion via a large bore, central vein rather than a peripheral vein. Most often the subclavian vein is catheterized percutaneously via the infraclavicular approach so that the tip of the feeding catheter can be placed in the middle of the superior vena cava. Nutrients delivered through this catheter are diluted rapidly in the vena cava resulting in less risk of inducing thrombophlebitis than if the infusion was into a smaller vessel such as the internal jugular vein. Accurate positioning of the catheter tip within the middle of the superior vena cava is verified by obtaining a chest roentgenogram prior to beginning the hypertonic IVH solutions. A constant rate of infusion is necessary to promote proper utilization of the administered glucose, amino acids, minerals and vitamins. Initially, 1000 ml is delivered in 24 hours to confirm the patient's ability to effectively metabolize the infused glucose. In the absence of hyperglycemia and glycosuria, the flow rate may be increased to 1000 ml every 12 hours. Pancreatic islet cells will again need the opportunity to adapt with an increased insulin output in response to the increased glucose infusion, but within the first 3-5 days the average adult usually will tolerate a daily ration of 3000 ml of IVH solution. Extremely wasted patients, however, may tolerate only 2000 ml per day until partial nutritional rehabilitation has been attained. The abrupt cessation of IVH may lead to insulin shock or reactive hypoglycemia. For this reason, IVH should be tapered off during the 24-48 hour period prior to completely discontinuing it. Generally the patient can be expected to gain 5-10 pounds during a three week interval of IVH. The initial 3-4 pound weight gain will be rehydration, but then the patient should gain lean body mass at a rate of about one-half pound per day. Body weight gain greater than one pound per day should be considered fluid retention, and the IVH delivery rate should be slowed or a diuretic administered.

During IVH the patient's metabolic status should be constantly reviewed in order to detect any need to alter the flow rate or composition of the nutrient solution. Important factors to examine on a regular basis are daily weights, fractional urine sugar concentration every six hours, daily intake and output, serum electrolytes, blood urea nitrogen and blood sugar levels three times a week, serum levels of albumin, magnesium, phosphorus, calcium and creatinine once a week, liver function tests, coagulation parameters and complete blood count once a week, and patient reevaluation for any temperature elevation. The nurse assigned to the hyperalimentation team changes the patient's catheter dressing and IVH delivery tubing three times a week, each time repreparing the skin with ether or acetone and an antiseptic solution. An antimicrobial ointment and a sterile dressing are reapplied to cover the catheter-skin entrance site. Proper technique must be utilized always and, doing so, a single feeding catheter can remain in place for prolonged periods of time without complications.

The patient who develops a fever during IVH is presumed to have catheter-related sepsis unless another primary focus of infection is apparent. Diagnosis of catheter-related sepsis is confirmed by a blood culture and a catheter culture positive for the same organism. The catheter should be removed immediately and the temperature usually returns to normal within 24-48 hours after catheter removal if the catheter was the source of the infection. If a primary focus of infection other than the catheter is identified and blood cultures are negative, the primary focus should be treated appropriately and the catheter left in place. Any positive blood culture, however, is an unequivocal indication for catheter removal. Twenty-four to forty-eight hours after temperature has returned to normal and blood cultures have become negative, the feeding catheter can be reinserted into the superior vena cava usually through the opposite subclavian vein.

The IVH delivery system should not be used indiscriminately. Blood, blood products and medications should be infused via an alternate vein whenever possible. A simultaneous peripheral intravenous infusion is often necessary to administer antibiotics, supplemental fluids, or chemotherapeutic agents. The incidence of catheter-related sepsis in our series of patients has ranged from 1 to 6%, with the highest rate of sepsis occurring in patients with cancer of the head and neck because they generally have open wounds or tracheostomy and pharyngostomy stomas nearby that may constantly contaminate the catheter dressings.[7]

## Clinical Material

In the past seven years, more than 1000 patients have received IVH as adjunctive nutritional therapy at the M. D. Anderson Hospital and Tumor Institute. From the Anderson series, 406 consecutive cancer patients have been reviewed.[8] Treatment categories were chemotherapy—43%; general surgery—24%; head and neck surgery—10%; radiotherapy—10%; fistulas—6%; and supportive care—7%. Hyperalimentation was infused for an average of 23.9 days; the average weight gained by these patients during IVH was 5 pounds; and 488 subclavian vein feeding catheters were utilized. Pathogenic organisms were grown from 4.4% of the catheters; however, simultaneous positive blood and catheter cultures were obtained in only 2.3% of the patients.

Intravenous hyperalimentation was used as an adjunct to chemotherapy in 175 patients, the average period of IVH infusion was 22.8 days and the average weight gain was 5.6 pounds. Whether mucositis and the symptoms of nausea and general malaise were reduced during IVH administration depended upon the chemotherapeutic regimens employed. Gastrointestinal symptoms secondary to 5-fluorouracil administration were reduced, whereas vinblastine and bleomycin continued to cause severe stomatitis. Leucocyte depression below 2500 cells/mm$^3$ occurred in 51.5% of patients for an average duration of 7.7 days. Neither the nadir nor duration of leucocyte depression appeared to be affected by IVH, and catheter-related sepsis occured in only 1.4% of patients. A 50% or greater reduction in measurable tumor mass was obtained in 27.8% of patients, and responding patients survived an average period of 8.2 months compared to a survival time of 1.9 months for nonresponding patients. In a group of patients with non-oat cell carcinoma of the lung, there appeared to be a positive correlation between good nutritional status and potential for response to chemotherapy. Nutritionally healthy patients or malnourished patients who were nutritionally replenished with IVH prior to and during chemotherapy were noted to have significantly better chemotherapy response rates than were malnourished patients who were not nutritionally replenished.[9]

Some degree of radiation enteritis or stomatitis often must be accepted for an adequate tumor dose of radiation therapy to be delivered to a malignancy that lies within or near the alimentary tract. Thirty-nine patients required treatment with IVH to complete a planned course of radiotherapy.[10] IVH was utilized for an average period of 30.7 days, average weight gain was 7.8 pounds, 95% of the patients completed their planned radiation therapy course, and 54% of the patients responded with a greater than 50% reduction in measurable tumor volume. As with the chemotherapy patients, those patients who responded to radiation therapy were able to maintain the weight gained during IVH after it was discontinued, but nonresponding patients promptly lost weight.

Of 100 patients who receive IVH as nutritional support for a general or thoracic surgical procedure, 52 underwent curative resections, including total gastrectomies, esophagectomies, and abdominal perineal resections, and 34 patients underwent diagnostic or palliative procedures involving major surgical intervention. Overall, IVH was infused for an average period of 24.2 days, the average weight gain during IVH was 4.2 pounds, and the mortality rate was only 4%. IVH was used for an average period of 12.3 days preoperatively and 13.9 days postoperatively. In those patients who received IVH both pre-and postoperatively, weight gain and a rise in serum albumin concentration were attained almost exclusively during the preoperative period. Because there were so few surgical complications in this group, we recommend that nutritional rehabilitative measures be instituted before operation instead of waiting until a catastrophic postoperative complication has occurred. Three patients has pharyngeal incompetence after a major head and neck surgical procedure.

Pharyngeal incompetence was thought to be secondary to muscle weakness and reversible muscle injury. Nutrition was maintained with IVH and deglutitory muscular rehabilitation was begun. Weight gain of as much as 26 pounds was achieved, and with concomitant return of general body muscle strength and tone, swallowing function returned after 18 to 48 days of IVH.

The experience with management of fistulas in cancer patients was rewarding. These fistulas presented several unique problems. Cancer was either discovered in the fistulous tract, the fistula involved an area of irradiated bowel or abdominal wall, or the patient's life expectancy was so short that the physician thought that the time needed to heal the fistula was not justified. Twenty-three patients were in these categories. Spontaneous closure of the gastrointestinal fistula occurred in 44% of the patients. After closure each patient was eventually discharged from the hospital and was able to lead a productive life for at least a short period of time. In two patients, spontaneous closure occurred even though gastrointestinal cancer was present in biopsies from the fistulous tract. Results of spontaneous closures of enterocutaneous fistulas arising from irradiated bowel were not good. Although spontaneous closure was achieved in several patients, each fistula eventually reopened and the patient either died or required a surgical remedy. The current recommendation for malnourished patients who have radiation-related fistulas of the gastrointestinal tract is to prepare them for the surgical procedure by utilizing IVH preoperatively for 14 to 21 days to stimulate weight gain and induce anabolism.

Malnutrition leads to immunosuppression as does chemotherapy, surgery and radiation therapy. In an attempt to define what part malnutrition plays in immune suppression associated with cancer therapy, 65 patients who were candidates for IVH were chosen for study.[11] These patients were tested with a battery of recall skin test antigens prior to and during nutritional replenishment with IVH. On initial evaluation, 46 patients had negative reactions to skin tests, and 29 (63%) converted skin tests to positive during an average period of 13.6 days of IVH. In the chemotherapy group, 16 to 21 negative reactors converted skin tests to positive in an average of 11.6 days. A significant reduction in tumor volume in response to chemotherapy occurred only in patients with positive skin test reactions. Death occurred only in patients with negative skin test reactions and was usually secondary to fungal sepsis. Those surgery patients who maintained positive skin test reactivity or converted skin tests to positive preoperatively had an uncomplicated postoperative recovery period. Surgery patients whose skin tests remained negative throughout IVH or converted to negative during IVH either expired postoperatively or had a prolonged postoperative course with multiple complications. In the radiotherapy patients, conversion of skin test reactions to positive during IVH was more difficult to achieve than in either the surgery or chemotherapy patient groups. Radiotherapy usually was being delivered to the thymus or large segments of bone marrow or blood (mediastinum, heart or pelvis) and radiotherapy to these areas probably reduced the number or efficacy of circulating T-lymphocytes responsible for delayed cutaneous hypersensitivity. Although skin test reactivity did not convert to positive in the radiotherapy group, there were few complications and nutritional rehabilitation with IVH was considered adequate. In these 65 patients, IVH was responsible for nutritional repletion and probably was responsible for the return of positive skin test reactivity in the majority of negative reactors. Certain chemotherapeutic drugs, radiation therapy, and the physiologic events associated with operative trauma may be innately immunosuppressive; nevertheless, this study indicated that much of the immune depression identified was secondary to malnutrition coincident with and often caused by the various therapeutic modalities. Restoring immune competence by nutritional repletion was desirable in these cancer patients since positive reactors had a better tumor response to chemotherapy and better tolerated oncologic treatment.[12]

## Conclusion

The malnourished cancer patient can be safely and effectively replenished with intravenous hyperalimentation for prolonged periods of time. Its use has allowed specific antineoplastic therapy to be administered to malnourished patients who otherwise might not have been acceptable candidates for intensive oncologic therapy. The risk of sepsis is negligible when aseptic catheter care techniques are carefully followed. Catheter-related sepsis in our hands has been about 2.3% and somewhat higher in patients with head and neck malignancies. Nutritional replenishment is rapid, often achieved within 10 to 20 days. If proper muscle rehabilitation is undertaken, the patient gains lean body mass during the infusion of amino acids, glucose, electrolytes, minerals and vitamins. Nutritional repletion often results in the return of immunocompetence and is associated with a reduction in sepsis, proper wound healing and an apparent increase in tumor response to chemotherapy. Tumor growth has not been stimulated by nutritional repletion. Experiments done in our laboratories to evaluate tumor growth, body weight and immunocompetence in rodents receiving either a normal diet or intravenous hyperalimentation revealed that IVH did not support tumor growth any better than did a normal diet, and for both diets, maintenance of body weight and immunocompetence were similar. Physicians

can practice good nutritional management in any hospital by exercising clinical judgment and using a few simple indices of nutritional status. An extensive nutritional battery is not needed in every case. Knowing the patient's disease, the treatment the patient has already received and the treatment the patient is going to get will determine the future risk of malnutrition. Couple this information with the patient's current weight, his change from usual body weight, his serum albumin concentration, and the reactivity to a battery of recall skin test antigens, and a reliable method for determining nutritional therapy is obtained. Cancer cachexia should no longer be a contraindication to adequate oncologic therapy.

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# Home Management of Nutrition For Patients Receiving Cancer Therapy


**Debra L. Ponder, M.S., R.D. and Heidi Van Slyke, R.D.**


In the past few years, the nutritional aspects of cancer therapy and metabolism have become major areas of interest and research. Much of the existing information deals in theory and not practice. The purpose of this paper is to present guidelines from which the practitioner can assess the nutritional status and nutrient requirements of a patient being treated for a malignancy on an outpatient basis. This review also describes factors which influence the nutritional status of the cancer patient and outlines methods of management.

Nutritional support measures should be implemented and continued on an outpatient basis to prevent the nutritional deterioration which often accompanies malignancy and its treatment.[1] The patient and family should be informed early that nutrition is an important and integral component of the management of the disease which will require his/her active participation.

Overweight or obese patients may be pleased with their new body image resulting from their initial weight loss. Convincing these patients of the importance of increased energy intake* to prevent excessive weight loss can be difficult. The goals of any nutritional support measures are weight stabilization or a weight gain of 1 to 2 lbs per week (if necessary).

*Although energy intake is the preferred term for calorie intake, the latter is the commonly used term throughout this article.

Indications that nutritional rehabilitation or support improve the results of cancer therapy are present in current literature.[1-4] Some of these advantages which have been suggested are as follows: (1) better tolerance to chemotherapy with fewer toxic side effects, increased positive response rates with decreased intervals between dosages; (2) increased immunocompetence; (3) improved quality of life and sense of well being, and (4) a possible positive tumor response where the patient otherwise may not have responded due to malnutrition.[3] The increased tumor cell mitosis produced by adequate nutrition may maximize the efficacy of chemotherapeutic programs.[1]

### Nutritional Assessment

A brief, yet informative, nutritional assessment may be completed by the physician in less than ten minutes. This involves determining (1) the percentage of weight loss over a specific time period and (2) the presence of a

decreased food intake due to hypogeusia, anorexia, or alimentary tract difficulties (Table 1). The percentage weight loss is significant in overweight as well as underweight patients. A patient exhibiting significant weight loss and decreased food intake should be assessed further to determine the degree to which the patient is nutritionally depleted.

The baseline food intake may be difficult to assess for the office physician who is without the services of a registered dietitian. Ideally, a 24 hour recall would be obtained and analyzed to determine calorie and protein intake. The recall would also be scanned for any gross nutrient deficiencies.

An alternative method available for evaluating the adequacy of the 24 hour recall is the Food Selection Check List (Table 2). This can be completed by the patient while waiting to see the physician. This list is based on the basic four food groups with the addition of fat sources.

The food selection checklist is based on a point system. For example, the suggested requirements for the milk and milk products group are three servings per day. For each serving chosen, five points are obtained. The total number of points is 100 when three selections are made from the milk and milk products, five fruits and vegetables, six breads and cereals, three meats or protein sources, and three fats and oils. A miscellaneous group is included (sugars, desserts, alcoholic beverages). No points are given for these substances since they provide energy-rich foodstuffs with low nutrient densities. Their use is recommended only after the requirements for the preceding food groups have been met.

At the University of Miami Hospitals & Clinics, the Nutritional Care Flow Sheet (Table 1) reflects the nutritional assessment process. The three basic categories of depletion are (I) mild or greater than 75% of normal, (II) moderate or 60% to 75% of normal, and (III) severe or less than 60% of normal. These categories provide a broad range from which the nutritional support therapy should be designed. The percentage of normal is derived from averaging (1) the percentage of usual weight, (2) the percentage of ideal body weight, and (3) the percentage of the recommended amounts of calories and protein consumed based on recommended levels.* For example, a patient with (1) a present weight less than 60% of his ideal and usual weight, (2) a serum albumin† less than 2.8 gm per 100 ml; (3) a calorie and protein intake less than 60% of the estimated requirements is considered severely depleted. Nonvolitional nutritional support measures such as intravenous hyperalimentation (IVH), enteral tube feedings, and defined formula diets (DFD) should be considered. It is postulated that severely undernourished patients exhibiting a severe degree of depletion may not be capable of the normal digestive and absorptive functions of the gastrointestinal tract. For this reason defined formula diets may be required. Few patients receive IVH or enteral nutrition by a tube on an outpatient basis. However, these alternatives must be considered when a patient is severely depleted or the situation is extended where the diet is inadequate and further plans for treatment are considered.

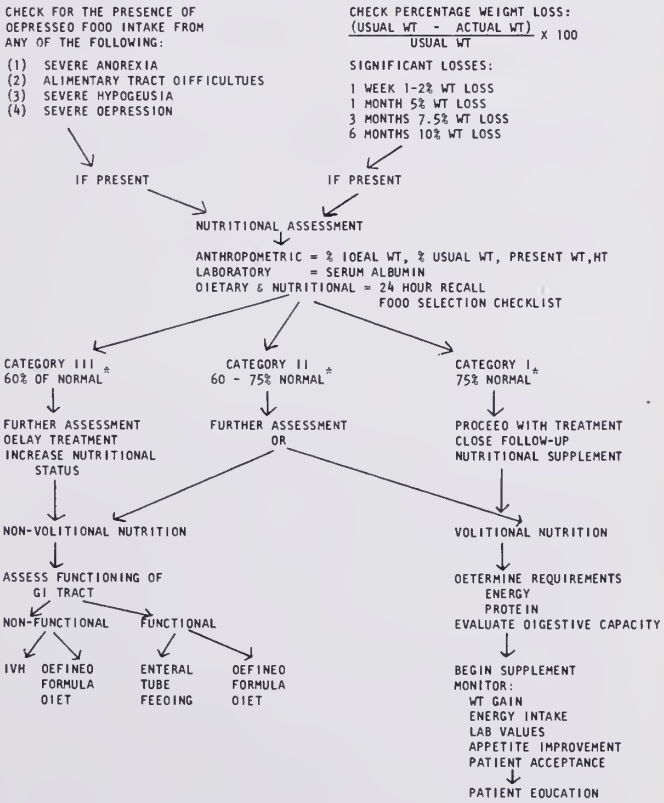
On the other hand, a patient with a present weight, serum albumin concentration, and calorie/protein intake greater than 75% of normal should be supplemented with a nutritional formula to compensate for any calorie deficit present. Most patients being treated on an outpatient basis can be maintained through volitional measures - energy rich foodstuffs, commercially prepared nutritional supplements, and/or defined formula diets.

*Others use a different classification for mild (90%) to moderate (60-90%) depletion. The standards on which the nutritional assessment parameters are based were derived from normal healthy subjects. Thus, a broader classification is necessary for oncology patients since there are no specific standards for this group.

†Albumin synthesis in the patient with a malignancy appears to be lower than normal with an increased turnover rate. Some part may be due to the poor nutrition of the host versus the malignant process itself.[5] For this reason, 3.5 gm per 100 ml is not used in the nutritional assessment process.

TABLE I

NUTRITIONAL CARE FLOW SHEET




* THIS STANDARD IS THE AVERAGE OF THE % OF IDEAL BODY WEIGHT, % OF USUAL WEIGHT, AND THE % OF REQUIREMENTS FROM THE FOOD SELECTION CHECKLIST.

TABLE II

FOOD SELECTION CHECK LIST

| REQUIREMENTS | FOOD GROUP | CREDIT POINTS | #/DAY | SCORE (PERCENTAGES) |
|---|---|---|---|---|
| 3 | Milk & Milk Products | Total 15 | | |
| | Milk (1 cup) | 5 | | |
| | Skim Milk (2 cups) | 5 | | |
| | Hard Cheese (1½ oz) | 5 | | |
| | Cottage Cheese (3/4 cup) | 5 | | |
| | Yogurt (1 cup) | 5 | | |
| | Ice Cream/Pudding (½ cup) | 5 | | |
| 5 | Fruits & Vegetables | Total 25 | | |
| | Whole Fruit (1) | 5 | | |
| | Juice (½ cup) | 5 | | |
| | Berries (½ cup) | 5 | | |
| | Vegetable (½ cup) | 5 | | |
| 6 | Breads & Cereals | Total 30 | | |
| | Dry Cereal (3/4 cup) | 5 | | |
| | Cooked Cereal (½ cup) | 5 | | |
| | Bread (1 slice, 1 roll) | 5 | | |
| | Pasta (½ cup) | 5 | | |
| | Potatoes (1 medium) | 5 | | |
| | Peas, Beans, Corn (½ cup) | 5 | | |
| 3 | Meats | Total 15 | | |
| | Meats, Fish, Poultry (3 oz) | 5 | | |
| | Eggs (2) | 5 | | |
| | Hard Cheese (2 oz) | 5 | | |
| 3 | Fats & Oils | Total 15 | | |
| | Butter, Margarine, oil (1 tsp) | 5 | | |
| | Mayonnaise (1 tsp) | 5 | | |
| | Salad Dressings | 5 | | |
| TOTAL | | 100 | | 100% |

MISCELLANEOUS*

| | | |
|---|---|---|
| Cakes | Hard Candy | Honey/Sugar |
| Cookies | Alcoholic Beverages | |
| Jello | Pies | |

*These are Energy-rich foodstuffs with low nutrient densities. Their use is recommended only after the preceding groups have been considered.

TABLE III

PATIENT EDUCATION MATERIALS

1) "NUTRITION FOR PATIENTS RECEIVING CHEMOTHERAPY AND RADIATION TREATMENT". AVAILABLE THROUGH LOCAL AMERICAN CANCER SOCIETY CHAPTERS (FREE).

2) "A GUIDE TO GOOD NUTRITION DURING AND AFTER CHEMOTHERAPY AND RADIATION". SANDRA AKER. R.D.. GAIL TILMONT, AND VANGEE HARRISON: MEDICAL ONCOLOGY UNIT: DIETARY DEPARTMENT. FRED HUTCHINSON CANCER RESEARCH CENTER, 1124 COLUMBIA STREET, SEATTLE, WASHINGTON 98104 ($2.00 PER COPY).

3) "FOOD FOR THOSE WHO HESITATE - TIPS THAT THEY MIGHT TOLERATE". JANE E. HELSEN, R.D., CANCER INFORMATION CENTER, DUKE UNIVERSITY COMPREHENSIVE CANCER CENTER, 200 ATLAS STREET, DURHAM, NORTH CAROLINA 27705 (FREE).

4) "NUTRITIONAL GUIDE FOR PATIENTS RECEIVING UPPER AND LOWER ABDOMINAL RADIATION THERAPY". C. PERSIGHEL, R.N., MOUNTAIN STATES TUMOR INSTITUTE, DEPARTMENT OF PATIENT AND FAMILY SUPPORT, 151 E. BANNOCH, BOISE, IDAHO 83702 ($1.00 PER COPY).

5) "HOME CARE GUIDE FOR PATIENTS WITH HEAD AND NECK DISEASE". UNIVERSITY OF WISCONSIN CLINICAL CANCER CENTER, PUBLIC AFFAIRS OFFICE, 1900 UNIVERSITY AVENUE, MADISON, WISCONSIN 53705 (FREE).

6) "HEALTH THROUGH NUTRITION: A COMPREHENSIVE GUIDE FOR CANCER PATIENTS". E.H. ROSENBAUM, M.D., C. STITT, R.D., H. DRASIN, M.D., I.R. ROSENBAUM. LIFE, MIND, AND BODY (ALCHEMY BOOKS), 1515 SCOTT STREET, SAN FRANCISCO, CALIFORNIA 94115.

## Factors Which Influence Food Intake

### Chemotherapy

The primary nutritional problem in cancer is the decline of food intake. Anticancer therapies frequently interfere with food intake in addition to disease-induced anorexia. Anticancer therapies may also cause epithelial denudation of the absorptive gut, autonomic disturbances producing nausea and vomiting, distortion of taste perception from the anticholinergic (dry mouth) action of some chemotherapeutic agents and from vitamin deficiencies resulting from antivitamin actions of some chemotherapeutic agents.[8] Psychological distress can also contribute to a transient anorexia in the cancer patient.[9]

Stomatitis and absorptive changes in the gut mucosa should be recognized as potential side effects of most chemotherapeutic agents. Dose-limiting oral mucosal toxicities occur after actinomycin D, methotrexate, and methylglyoxal bisguanylhydrazone.[10] Oral mucosal toxicity has also been observed after azaserine, daunorubicin, adriamycin, and 5-fluorouracil.[10]

There are few dietary measures which compensate for the alimentary tract changes previously mentioned. Popsicles, ice chips, or slushes made from frozen juices provide a source of carbohydrate calories and are soothing to the ulcerated mucosa. The best accepted supplements for use in frozen or clear liquids include glucose polymers (Polycose, Controlyte). Fruit-flavored and albumin-based supplements (Precision LR, Citrotein) are also well accepted when mixed in gelatin, sodas, or juices.

The effect of providing intact nutrient sources in patients with abnormal absorptive/digestive capacities due to toxicity from chemotherapeutic agents is questionable. Defined-formula diets are available which contain purified amino acids or hydrolyzed protein with amino acid supplements as their protein source, glucose oligosaccharides as the carbohydrate source, and small amounts of polyunsaturated long-chain fats or medium-chain triglycerides as the fat sources. These require minimal digestive/absorptive capacity and are generally well tolerated for short periods of time. These are best accepted when served as ices, in mixture gelatin, or mixed with juices, water, or soda. These formulas are low residue; thus fecal volume is markedly reduced. Preparations with purified amino acids tend to produce a bitter taste response and may not be well accepted. Defined formula diets frequently have osmolalities of 450 or more, thus requiring slow ingestion.

Nausea and vomiting which accompany chemotherapy are treated primarily through the use of antiemetic drugs 30 minutes preceding a meal. The phenothiazine antiemetics have been significantly effective.[10] Few

dietary manipulations have proven effective in decreasing nausea and vomiting. However, serving cold foods in place of hot foods (the aroma of hot foods may stimulate nausea), small frequent meals, serving no liquids 30 minutes pre- or postprandial, and serving lemons or dill pickles to patients without stomatitis may help reduce nausea.

### Taste Acuity

Taste alterations are frequently demonstrated in cancer patients. Clinical evidence from studies conducted by DeWyss[11], showed that dysgeusia can be demonstrated in cachectic cancer patients characterized by a reduced threshold to bitter tastes (characterized by amino groups) and an increased threshold to sweets. Patients who reject meat (beef, pork) because of changes in taste sensation may be able to tolerate milk, cheese, eggs, fish, and poultry as suitable protein sources. For patients to detect a "sweet" taste increased concentration of sugar in foodstuffs may be necessary. The preference for sucrose appears to decrease in the later stages of the disease process.

An association between zinc and gustatory function has been suggested for some time. Henkin reported that some disorders of taste can be corrected with the administration of oral zinc sulfate; however, a clinical trial of this material in the anorectic patient has not been conducted.[2,12] More recent studies have indicated the following: (1) Zinc depletion in humans with decreased intestinal absorption seems to be definitely related to hypogeusia and (2) not all cases of hypogeusia are related to zinc deficiency.[13]

Decreased salivation or a "dry mouth" may indicate the need for texture modifications to include foods of a liquid consistency (soups, puddings, gelatins, cottage cheese). Fresh lemon juice or lemonaide may help stimulate salivation. Sour balls also help relieve the "dry mouth" and contribute carbohydrate calories.

Radiotherapy may result in serious nutritional consequences. Patients receiving radiotherapy to the head and neck region frequently exhibit the following symptoms: sore throat, pain on swallowing, dry mouth, lack of appetite, and altered taste.[14] In the presence of ulcerated gastrointestinal mucosa tart or acid foods such as citrus juices frequently cause a burning sensation. Consistency modifications may be necessary. Chemical irritants (pepper, caffeine, chili powder, alcohol) are frequently eliminated as well as thermal irritants (extremes in temperature).[15]

The irradiation of the salivary glands and resultant changes in the quanitity and quality of saliva are factors in the origin of dental caries in these patients. The sucrose content of the diet may need to be reduced while the high-protein, high calorie content of the diet is maintained.

Solid sweets (candy), retentive sweets (cakes and jellies), and sugar in solutions (soft drinks, presweetened beverages) are avoided. Artificial sweeteners are often used in place of sugar.[15]

### Formulating the Diet Prescription

The first step in formulating the diet prescription involves calculating the calorie and protein requirements. The adult requires 30-35 calories per kilogram of ideal body weight to meet calorie requirements.[1,6] Some patients may require up to 45 calories per kilogram of ideal weight.[1] Protein requirements range from 1.2 to 1.5 grams per kilogram of ideal body weight.[1,6] The patient should be informed that adequate calorie and protein intakes are the priorities of their diet.

Vitamin and mineral supplementation are suggested in the patient who is unable to consume adequate amounts of the basic four food groups. A multiple vitamin with mineral preparation, when taken in the recommended dosage, is advisable in any patient with transient episodes of inadequate oral intake. Cancer patients frequently demonstrate deficiencies of folic acid, ascorbic acid and pyridoxine.[7]

The patient must be included in the diet prescription process. The means by which the additional (calories-/protein) nutrients are provided should be decided by the patient. Some patients prefer nutritionally complete supplemental formulas; other patients may prefer energy-rich foodstuffs* such as double-strength milk, cream based soups, ice cream sodas, etc.

The volume of commercially prepared nutritional formulas required to meet the estimated energy requirements is easier to determine than the specific types and amounts of energy-rich foodstuffs which would supply the additional calories. However, energy-rich foodstuffs are preferred by many patients.

### Effective Means of Nutritional Support

Due to the effects of the cancer treatment and the disease process itself, determining an acceptable means of maintaining adequate nutritional status may present a challenge to the patient as well as to the physician. The alternatives for nutritional support measures are volitional feedings (liquid formulas, high calorie foodstuffs) and nonvolitional feedings (enteral tube feedings, intravenous hyperalimentation). The quantity of regular food-stuffs needed to achieve the estimated calorie requirements may be intimidating to the anorexic patient. For this reason, energy and nutrient dense formulas are chosen as a means for providing additional calories and protein.

*Recipes for energy rich foodstuffs may be obtained from the patient education materials included in Table 3.

TABLE IV Commercially Prepared Nutritional Products per 1000 kilocalories

1. Intact Protein (Meat and/or Milk Base)[T]

| Product | Complete - B | Formula 2 | Magnacal B [+] | Low-Pro+ Carnacal | Carnation Instant Breakfast[ϕ] |
|---|---|---|---|---|---|
| Manufacturer | Doyle | Cutter Labs | Hospital Diet. Products | Hospital Diet. Products | Carnation |
| Packaging | 400 ml cans<br>250 ml bottles | 200 ml jars | 360ml bottles | 360ml bottles | 6 envelopes/box |
| Caloric Density (cal/ml) | 1.00 | 1.00 | 1.50 | 1.02 | 1.08 |
| Osmolarity mOs/kg $H_2O$ | 490 | 435-510 | 725 | 575 | ** |
| Volume to Meet 100% RDA's in ml's | 1600 | 2000 | 1000 | 1000 | 1373 |
| % Calories derived from protein | 16.0 | 15.0 | 13.3 | 8.4 | 20.5 |
| % Calories derived from Carbohydrate | 48.0 | 38.3 | 43.2 | 53.5 | 54.8 |
| % of Calories derived from Fat | 36.0 | 46.7 | 43.5 | 38.1 | 24.7 |
| Lactose, gm | 24.4 | 37.5 | ** | ** | 84.0 |
| Calories/Nitrogen,gm | 131.25 | 142.16 | 390.49 | 270.93 | 88.06 |
| Protein, gm<br>Protein source | 40.0<br>Nonfat dry milk; Beef | 37.5<br>Nonfat dry milk, Beef, Some wheat Protein | 33.0<br>Puree beef, Soy Protein | 21.5<br>Nonfat dry milk, Puree Beef | 58.0<br>Whole milk; nonfat dry milk; soy Prot. Na caseinate |
| Carbohydrate, gm<br>Carbohydrate source | 120.0<br>Maltodestrin;vegs,frts Lactose; sucrose | 122.5<br>Lactose;Sucrose Vegs. Or. Jce. | 407.0<br>Corn syrup solids, Fruits, Vegs. | 134.0<br>Corn syrup solids; frts. veg. | 135.0<br>Sucrose; Corn Syrup Solids; Lactose |
| Fat, gm<br>Fat source | 40.0<br>Corn oil; Beef fat | 40.0<br>Beef Fat Corn oil;Egg yolks | 48.2<br>Soy oil, mono & di-glycerides | 44.0<br>Soy oil, mono & di-glycerides | 31.0<br>Whole milk; Fat |
| mEq Na/l | 67.82 | 22.96 | 31.5 | 18.6 | ** |
| mEq K/l | 33.33 | 37.95 | 27.0 | 26.6 | ** |
| Function | Unflavored; ready to use meat base blenderized tube feeding formula for patients requiring total nutritional support Moderate residue. | Orange flavored ready to use meat base blenderized oral and tube feeding for pts. requiring total nutritional support. Moderate residue. | Ready to use meat & milk base blenderized formula for pts. requiring total or supplemental nutritional support. Moderate residue. | Low-protein content of high biological value. cholesterol. Ready to use supplemental or complete nutritional support formula | Various flavors mixed with whole milk for oral supplementation |
| Flavors | Unflavored | Orange | Vanilla | Vanilla | Chocolate; Eggnog; Chocolate Malt; Vanilla; Strawberry |
| Availability | Hospital Pharmacy Drug Stores | Hospital Pharmacy Drug Stores | Special order - HDP Corporation (Toll-Free) 800-854-0128 | Special order - HDP Corporation (Toll-Free) 800-854-0128 | Grocery Stores |

T All formulas are low lactose, low residue unless otherwise specified

+ Some of a variety of formulas offered by Hospital Diet Products Corporation

ϕ Vanilla flavor used; whole milk added

ϕϕ Vanilla flavor used

++ Chocolate flavor used

*** Calculations based on 1 - 5 oz. serving

1. Intact Protein (cont'd.)

| Product | Nutrament$^{\phi\phi}$ | Meritene Liquid$^{\phi\phi}$ | Meritene + Milk$^{\phi}$ | Nutri - 1000 | Sustacal Liquid |
|---|---|---|---|---|---|
| Manufacturer | Orackett Products | Doyle | Ooyle | Cutter labs | Mead-Johnson |
| Packaging | 360 ml cans | 240 ml & 300 ml cans | 1, 4½, 25 lb. cans, 100 lb. cartons | 300 ml & 960 ml cans | 240 ml; 360 ml & 960 ml cans |
| Caloric Oensity (cal/ml) | 1.00 | 1.00 | 1.10 | 1.06 | 1.06 |
| Osmolarity mOs/kg $H_2O$ | ** | 560 Vanilla; 610 Chocolate; 617 Eggnog | 690 | 503 | 625 |
| Volume to Meet 100% ROA's in ml's | 1080 | 1200 | 1095 | 1920 | 1080 |
| % Calories derived from protein | 19.2 | 24.7 | 25.9 | 15.1 | 24.1 |
| % Calories derived from Carbohydrate | 53.8 | 47.5 | 44.6 | 38.2 | 55.4 |
| % Calories derived from Fat | 27.0 | 27.0 | 29.5 | 46.7 | 20.5 |
| Lactose, gm | ** | 56.7 | 97.5 | 50.1 | 16.7 |
| Calories/Nitrogen, gm | 116.41 | 76.04 | 71.65 | 140.47 | 78.59 |
| Protein, gm<br>Protein source | 48.0<br>Ca & Na caseinate; Skim milk; Soy Pro. Isolate | 60.0<br>Na caseinate; Conc. Skim milk | 69.0<br>Whole milk; nonfat dry milk | 40.0<br>Na caseinate Skim milk | 61.0<br>Skim milk, Na & Ca Caseinates; Soy Protein Isolate |
| Carbohydrate, gm<br>Carbohydrate source | 156.0<br>Sucrose<br>Corn Syrup Solids | 115.0<br>Lactose; Corn Syrup Solids Sucrose | 119.0<br>Lactose; Corn Syrup Solids | 101.0<br>Corn syrup Solids; Sucrose; Lactose | 140.0<br>Sucrose; Lactose; Corn Syrup Solids |
| Fat, gm<br>Fat source | 30.0<br>Partially Hydrogenated Soybean Oil | 30.0<br>Vegetable Oil; Monodi-glycerides | 35.0<br>Whole Milk | 55.0<br>Corn Oil | 23.0<br>Partially Hydrogenated Soy Oil |
| mEq Na/l | ** | 39.13 | 40.26 | 22.96 | 40.78 |
| mEq K/l | ** | 51.28 | 75.92 | 37.95 | 53.46 |
| Function | Various Flavors for oral supplemental or total nutritional support | †Pro., †Cal for oral supplementation or full liquid diets | †Pro.,†Cal oral supplementation or complete liquid diet | Nutritionally complete for oral supplementation or tube feeding | †Protein nutritionally complete for oral supplementation or total nutritional support |
| Flavors | Vanilla; Chocolate Dutch Chocolate Strawberry; Chocolate Marshmallow | Vanilla, Chocolate; Eggnog | Plain; Chocolate; Eggnog | Vanilla; Chocolate | Vanilla; Chocolate |
| Availability | Grocery Stores | Hospital Pharmacy; Drug Stores | Hospital Pharmacy Drug Stores | Hospital Pharmacy Drug Stores | Hospital Pharmacy Orug Stores |

1. Intact Protein (cont'd.)

| Product | Sustacal + Milk+ | Sustacal Pudding++ | Sustagen + Water$\phi\phi$ | UMHC/NCCH++ Formula I | UMHC/NCCH Formula II++ |
|---|---|---|---|---|---|
| Manufacturer | Mead-Johnson | Mead Johnson | Mead-Johnson | UMHC/NCCH Dietetic Serv. | UMHC/NCCH Dietetic Service |
| Packaging | 1.9oz packets; 3.8 lb cans | 5oz tins*** | 1 lb & 5 lb cans | 250ml/serving | 250ml/serving |
| Caloric Density (cal/ml) | 1.00 | 1.80 | 1.70 | 1.72 | 1.17 |
| Osmolarity mDs/kg $H_2O$ | 760 | N.A. | 1334 | ** | ** |
| Volume to Meet 100% RDA's in ml's | 1080 | N.A. | 1050 | 1200 | 1375 |
| %Calories derived from protein | 24.1 | 11.0 | 23.9 | 16.8 | 27.1 |
| %Calories derived from Carbohydrate | 55.4 | 53.0 | 68.4 | 43.5 | 67.6 |
| %Calories derived from Fat | 20.5 | 36.0 | 7.7 | 39.7 | 5.3 |
| Lactose, gm | 114.4 | 36.0 | 57.3 | ** | ** |
| Calories/Nitrogen, gm | 78.87 | 195.87 | 79.46 | 124.00 | 67.00 |
| Protein, gm Protein source | 61.0 Whole Milk; Nonfat Dry Milk | 6.8 Nonfat Milk | 105.0 Nonfat Milk; Ca Caseinate; powdered Whole Milk | 72.2 Ca caseinate; Cows milk | 79.1 Ca caseinate; Cows milk |
| Carbohydrate, gm Carbohydrate source | 140.0 Sucrose; Lactose; Corn Syrup Solids | 32.0 Sucrose; Lactose; Modified Food Starch | 300.0 Corn syrup Solids Dextrose (Choc. flavor-Sucrose) | 186.1 Glucose, Lactose Sucrose, Oligo-saccharides (Choc. flavor-sucrose) | 195.7 Glucose, Lactose, Sucrose, Oligo-saccharides, (Choc. flavor-Sucrose) |
| Fat, gm Fat source | 23.0 Cows Milk | 9.5 Partially Hydrogenated Soy oil | 15.0 Powdered Whole Milk Fat (Choc. Flavor-cocoa) | 75.68 Whole Milk Fat, ½ & ½, cocoa | 6.9 Cocoa |
| mEq Na/l | 40.78 | 5.22 | 52.17 | 27.20 | 30.68 |
| mEq K/l | 53.46 | 7.44 | 82.05 | 38.64 | 7.2 |
| Function | Nutritionally Complete for oral supplementation. | As a nutritional supplement. Provides an alternate to liquids | Total nourishment for tube or oral feedings | Various flavors mixed w/ milk & pro. powder for pts. requiring oral supplements | Various flavors mixed w/ sk. milk & Prot. powder for pts. requiring oral supplements. |
| Flavors | Vanilla; Chocolate | Vanilla; Chocolate, Butterscotch | Vanilla; Chocolate | Vanilla; Choc. | Vanilla; Chocolate |
| Availability | Hospital Pharmacy Drug Stores | Hospital Pharmacy Drug Stores | Hospital Pharmacy Drug Stores | Special recipe UMHC/NCCH Dietetic Serv. Miami, Florida | Special Recipe UMHC/NCCH Dietetic Service Miami, Florida |

2. Intact Protein Isolates[T]

| Product | Ensure | Ensure Plus | Ensure Osmolite | Isocal | Lolactene |
|---|---|---|---|---|---|
| Manufacturer | Ross | Ross | Ross | Mead-Johnson | Ooyle |
| Packaging | 240ml bottles & cans 960ml cans | 240 ml cans | 240ml bottles & cans 960ml cans | 240ml bottles & 960ml cans | 2 oz-packets |
| Caloric Oensity (cal/ml) | 1.06 | 1.50 | 1.06 | 1.06 | 0.8 (std. dilution) |
| Osmolarity mOs/kg $H_2O$ | 450 | 600 | 300 | 350 | 670 |
| Volume to Meet 100% RDA's in ml's | 1920 | 1920 | 2000 | 1920 | 1150 |
| % Calories derived from Protein | 14.0 | 14.7 | 14.0 | 12.9 | 26.0 |
| % Calories derived from Carbohydrate | 54.5 | 53.3 | 54.6 | 50.2 | 53.0 |
| % Calories derived from Fat | 31.5 | 32.0 | 31.4 | 36.9 | 21.0 |
| Lactose, gm | 0 | 0 | 0 | 0 | 4.0 |
| Calories/Nitrogen gm | 154.22 | 145.11 | 154.39 | 169.85 | 69.98 |
| Protein, gm Protein source | 37.0 Na & Ca caseinates; Soy Protein Isolate | 55.0 Na & Ca caseinates; Soy Protein Isolate | 37.0 Na & Ca caseinates; Soy Protein Isolate | 34.0 Na & Ca caseinate; Soy Protein Isolate | 66.2 Na caseinate; Nonfat Ory Milk |
| Carbohydrate, gm Carbohydrate source | 145.0 Corn Syrup Solids; Sucrose | 200.0 Corn Syrup Solids; Sucrose | 143.0 Hydrolyzed Corn Syrup | 132.0 Corn Syrup | 132.4 Corn Syrup Solids |
| Fat, gm Fat source | 37.0 Corn Oil | 53.0 Corn Oil | 38.0 Coconut Oil (MCT) Corn Oil, Soy Oil | 44.0 Soy Oil; MCT Oil | 23.5 Vegetable Oil; Mono-diglycerides |
| mEq Na/l | 32.17 | 46.09 | 23.43 | 22.96 | 47.90 |
| mEq K/l | 32.56 | 48.72 | 26.90 | 33.82 | 79.00 |
| Function | Complete Balanced nutrition for oral supplementation or tube feeding | ↑cal balanced liquid nutrition for oral supplementation or tube feeding | Isotonic nutritionally complete ↓ residue food for supplemental or total feeding, oral or tube | Standard ready to use - lactose free tube feeding | Nutritionally complete ↓lactose ↓ residue for supplemental or total feeding, oral or tube |
| Flavors | Vanilla; Black walnut, Flavoring Packets: Orange, Pecan, Cherry Strawberry, Lemon | Vanilla, Flavoring Packets: Orange, Cherry, Pecan, Strawberry, Lemon | Unflavored; flavoring Packets: Orange, Pecan, Lemon, Strawberry | Unflavored | Vanilla |
| Availability | Hospital Pharmacy Orug Store | Hospital Pharmacy Orug Store | Hospital Pharmacy Orug Store | Hospital Pharmacy Orug Store | Hospital Pharmacy Orug Store |

2. Intact Protein Isolates (cont'd.)

| Product | Nutri - 1000 LF | Precision HN | Precision-Isotonic | Precision LR |
|---|---|---|---|---|
| Manufacturer | Cutter Labs | Doyle | Doyle | Doyle |
| Packaging | 300ml & 960ml cans | 2.93-oz. Packets | 2.06-oz Packets | 3-oz Packets |
| Caloric Density (cal/ml) | 1.06 | 1.05 (std. dilution) | 1.0 (std. dilution) | 1.11 (std. dilution) |
| Osmolarity mOs/kg $H_2O$ | 381 | 560 | 300 | 520 -orange flavor |
| Volume to Meet 100% RDA's in ml's | 1920 | 3000 | 1500 | 1900 |
| % Calories derived from Protein | 15.1 | 16.7 | 12.0 | 9.5 |
| % Calories derived from Carbohydrate | 38.2 | 82.9 | 59.9 | 89.9 |
| % Calories derived from Fat | 46.7 | 0.4 | 28.1 | 0.6 |
| Lactose, gm | <10.0 | 0 | 0 | 0 |
| Calories/Nitrogen, gm | 140.47 | 188.90 | 182.33 | 241.15 |
| Protein, gm<br>Protein source | 40.0<br>Na & Ca caseinates; Soy Protein Isolate | 44.0<br>Egg albumin | 29.0<br>Egg albumin | 26.0<br>Egg albumin |
| Carbohydrate, gm<br>Carbohydrate source | 101.0<br>Corn Syrup Solids; Sucrose | 218.0<br>Maltodextrin; Sucrose | 144.0<br>Glucose; oligosaccharides; Sucrose | 249.0<br>Maltodextrin; Sucrose |
| Fat, gm<br>Fat source | 55.0<br>Corn & soybean oil (partially saturated) | 0.5<br>Soy oil | 30.0<br>Vegetable oil | 0.8<br>Soy oil |
| mEq Na/l | 31.26 | 43.48 | 34.78 | 30.43 |
| mEq K/l | 37.95 | 23.08 | 24.62 | 22.31 |
| Function | Nutritionally complete for oral supplementation or tube feeding. Lactose free food. | Nutritionally complete + nitrogen +residue food for oral or tube feeding | Nutritionally balanced isotonic formula for oral or tube feeding | Nutritionally complete +residue food for oral or tube feeding |
| Flavors | Vanilla; Chocolate | Citrus Fruit | Vanilla | Cherry, Lemon, Lime, Orange |
| Availability | Hospital Pharmacy<br>Drug Store | Hospital Pharmacy<br>Drug Store | Hospital Pharmacy<br>Drug Store | Hospital Pharmacy<br>Drug Store |

3. Protein Hydrolysates or Crystalline Amino Acids[T]

| Product | Flexical | Vipep | Vital | Vivonex | Vivonex HN |
|---|---|---|---|---|---|
| Manufacturer | Mead-Johnson | Cutter Labs | Ross | Eaton | Eaton |
| Packaging | 2-oz. tin; 1 lb cans | 80 gm packets | 2.75-oz packet | 80 gm packets | 80 gm packets |
| Caloric Density (cal/ml) | 1.00 (std. dilution) | 1.00 (Std. dilution) | 1.00 (std. dilution) | 1.00 (std. dilution) | 1.00 (std. dilution) |
| Osmolarity mOs/kg $H_2O$ | 550 | 520 | 450 | 550-Unflavored 645-Flavored | 810-Unflavored 870-Flavored |
| Volume to Meet 100% RDA's in ml's | 2000 | 2000 | 2000 | 1800 | 3000 |
| % Calories derived from Protein | 9.0 | 10.0 | 16.7 | 8.2 | 17.7 |
| % Calories derived from Carbohydrate | 61.0 | 68.0 | 74.0 | 90.5 | 81.5 |
| % Calories derived from Fat | 30.0 | 22.0 | 9.3 | 1.3 | 0.78 |
| Lactose, gm | 0 | 0 | 0 | 0 | 0 |
| Calories/Nitrogen, gm | 254.44 | 231.75 | 120.54 | 277.83 | 126.34 |
| Protein, gm Protein source | 22.5 Hydrolyzed casein, pure crystalline amino acids | 25.0 hydrolyzed fish proteins, essential amino acids | 42.0 soy, meat, whey hydrolysates, Free amino acids | 21.0 Pure crystalline amino acids | 42.0 Pure crystalline amino acids |
| Carbohydrate, gm Carbohydrate source | 152.5 Corn Syrup Solids; Tapioca starch | 175.5 Corn Syrup Solids; sucrose; K gluconate; corn starch Tapioca flour | 185.0 Maltodextrin, oligo & Polysaccharides | 230.0 Glucose, oligosaccharides | 210.0 Glucose, oligosaccharides |
| Fat, gm Fat source | 34.0 Soy oil, MCT oil | 25.0 MCT oil, Corn oil | 10.0 Sunflower oil | 1.5 Safflower oil | 1.0 Safflower oil |
| mEq Na/l | 15.2 | 32.6 | 16.7 | 37.4 | 33.5 |
| mEq K/l | 32.0 | 21.8 | 29.9 | 30.0 | 18.0 |
| Function | ↓residue, chemically defined diet for pts. with minimum digestive activity & levels of fecal residue. Nutritionally complete for oral (poor acceptance) or tube feeding | Peptide formula ↓residue chemically defined diet for pts. with minimum digestive activity & levels of fecal residue. Nutritionally complete for oral (very good acceptance) or tube feeding | ↓residue, hydrolyzed protein diet for pts. with minimum digestive activity & levels of fecal residue. Nutritionally complete for oral (excellent acceptance) or tube feeding | low residue. Chemically defined diet for pts. with minimum activity & levels of fecal residue. Nutritionally complete for oral (very poor acceptance) or tube feeding | low residue ↓nitrogen diet for pts. with minimum digestive activity & levels of fecal residue. Nutritionally complete for oral (very poor acceptance) or tube feeding. |
| Flavors | Unflavored | Custard, orange & strawberry | Banana, Flavor packets: lemon cherry, orange strawberry, pecan | Vanilla, orange strawberry, grape, chocolate, beef broth, tomato | Grape, orange, tomato strawberry, beef broth |
| Availability | Hospital Pharmacy Drug Store | Hospital Pharmacy Drug Store | Hospital Pharmacy Drug Store | Hospital Pharmacy Drug Store | Hospital Pharmacy Drug Store |

4. Feeding Modules - Supplementary Feedings - Value Per Unit Serving*

| Product | Amin-Aid | Cal-Power | Casec | Citrotein | Controlyte | dp High p.e.r. Pro. | Gatorade | Gevral |
|---|---|---|---|---|---|---|---|---|
| Manufacturer | McGraw | General Mills | Mead-Johnson | Doyle | Doyle | General Mills | Stokley | Lederle |
| Protein, gm | 6.6 gm | 0 | 4.0 | 7.67 | 0.04 | 5 | 0 | 15.6 |
| Carbohydrate, gm | 118 gm | 34.2 | 0 | 23.3 | 72.0 | 0.5 | 11.0 | 7.05 |
| Fat, gm | 22 gm | 0 | 0 | 0.33 | 24.0 | 0.2 | 0 | 0.52 |
| Sodium, mEq | < 2.0 | 0.6 | 0.10 | 5.65 | 0.65 | 0.52 | 5.56 | 0.43 |
| Potassium, mEq | < 2.0 | ** | N.A. | 3.33 | 0.10 | 0.23 | 0.62 | 0.26 |
| Amount per Unit Serving | 1 packet with 250ml $H_2O$→340ml | 60ml - (2oz) 136.8 kcal | 1 or more packed Tb (4.7 gm) | 1-1.18 oz. packet with 6oz $H_2O$, 127 kcal | 100 gms. mixed with 120ml $H_2O$ 504.15 kcal | 1 Tb (6 gm) 24 kcal. | 8-fl. oz (240ml), 44 kcal. | 1/3 cup (26 gms) 95.6 kcal |
| Usage | ↑cal essential amino acid supplement for renal failure therapy | Conc. source of CHO | Protein supplement low in Na | Protein & Cal. vitamin & mineral supplement | conc. source of prot. low electrolyte source | Protein & low electrolyte source | calorie & electrolyte source | ↑ protein, vitamin & mineral supplement. Good oral acceptance |

4. Feeding Modules - Supplementary Feedings - Value Per Unit Serving* (Cont'd.)

| Product | Hy-Cal | Lipomul-Oral | Lonalac | Lytren | MCT Oil | Microlipid | Polycose Liquid | Polycose Powder |
|---|---|---|---|---|---|---|---|---|
| Manufacturer | Beecham Massengill | Upjohn | Mead-Johnson | Mead-Johnson | Mead-Johnson | Hosp. Diet Products | Ross | Ross |
| Protein, gm | 0 | 0 | 9.5 | 0 | 0 | 0 | 0 | 0 |
| Carbohydrate, gm | 72.0 | 0 | 28.9 | 63.25 | 0 | 0 | 62.4 | 7.52 |
| Fat, gm | 0 | 20.0 | 0.4 | 0 | 8.3 | 15.0 | 0 | 0 |
| Sodium, mEq | 0.71 | ** | 1.1 | 25.0 | N.A. | N.A. | 3.14 | 0.38 |
| Potassium, mEq | 0.02 | ** | 7.6 | 20.75 | N.A. | N.A. | 0.07 | 0.01 |
| Amount per Unit Serving | 4 oz bottle 288 kcal. | 2Tb (30ml) 180 kcal | 8 oz (240ml) 158 kcal (4 Tbs.) | 4 oz (120ml) | 1 Tb (115kcal) | 1 fl oz. 135 kcal. | 4 fl oz bottles, 250 kcal. | 1 Tb (8 gm) 32 kcal. |
| Usage | ↑CHO source of kcal, ↓protein ↓electrolyte | Conc. fat source (Corn Oil) | Protein Supplement for low Na diets | Electrolyte supplement | fat source for malabsorption of long chain triglycerides | Concentrated fat source | concentrated CHO source, ↓protein, added to beverages | ↑CHO source of kcal. ↓protein added to foods or beverages |

| Product | Sumacal |
|---|---|
| Manufacturer | Hosp. Diet Products |
| Protein, gm | 0 |
| Carbohydrate, gm | 15-21 |
| Fat, gm | 0 |
| Sodium, mEq | 0.33 |
| Potassium, mEq | 0.03 |
| Amount per Unit Serving | 1 fl. oz 60-83 kcal depending on flavor |
| Usage | CHO source of calories |

* Feeding modules serve as building blocks which can be structured or arranged according to the patient's need. Modular supplements provide carbohydrate, protein, fat, vitamins, minerals, and electrolytes as separate components.

** Information not available.

The nutritional supplement chosen should provide the percentage of calories remaining from the Food Selection Check list. For example, completion of the Food Selection Check List reveals a 75% intake of estimated food requirements. Thus, a 25% calorie deficit is established. The patient's ideal weight for height† is 70 kilograms or 154 pounds. The estimated calorie requirements =2450

35 Kcal X 70 Kgm = 2450 calories

Twenty five percent of the estimated calorie requirements (2450) equals 600 calories; thus, 600 calories of a nutritional supplement should be provided daily in addition to the amounts ingested as listed on the Food Selection Check List.

The calories per ml of supplement are listed on the Nutritional Formula Composition Chart (Table 4).

The patient whose assessment parameters fall in category II should be assessed further (details on more quantitative measures of nutritional assessment can be found in reference 6). If further assessment is not possible, more aggressive means of nutritional support (IVH, enteral tube feedings, DFD) may be considered. In either case, nutritional rehabilitation is a priority. The patient requires close follow-up to determine the efficacy of the nutritional support measures selected. Biweekly office visits should include weight determinations and a detailed food record with the quantity of supplemental formula ingested. A multivitamin/mineral preparation is suggested. Any alterations in degistive/absorptive capacity should be considered with the appropriate selection of nutrient sources.

Patients should receive nutritional supplements separate from their normal meals. Patients presenting with progressive anorexia may ingest more calories via the supplemental formula alone. Amounts ranging from 100 to 200 ml per hour during waking hours (9 a.m. - 8 p.m.) can provide 1800 to 3600 calories respectively.*

Patients whose nutritional assessment place them in category III should probably be admitted to an acute care hospital where IVH or enteral tube feedings can be instituted. (For further information see references 16, 17). Patients who are in the terminal stages of their disease may require supportive care only.

Behavioral techniques used in adults with cancer seem to have little effect on their food intake. Attention should be given to the creation of a pleasant atmosphere around meals. The family should encourage the patient to eat and show concern with his/her food preferences. The value of social interaction with a family member or friend during meal times is sometimes immeasurable.[9]

## Conclusion

Nutritional support in the cancer patient is and important adjunct to therapy. All patients deserve the improved sense of well-being which frequently accompanies nutritional support.

Effective means of nutritional support should begin with the initial diagnosis of the disease and can be obtained on an outpatient basis through the use of (1) nutritional supplements, (2) close follow-up with positive reinforcement, (3) informative patient education materials and (4) volitional and nonvolitional feeding techniques. Preceding the formulation of the diet prescription, the degree of depletion (mild, moderate, severe) should be determined. Any dietary alterations should take into consideration the patient's individual tolerances and preferences.

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†Derived form Metropolitan Life Insurance Tables.

*Calculations were based on a Calorically dense formula providing 1.5 Calories per cc.


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# Nutritional Assessment

## A Guide to Diagnosis and Treatment of the Hypermetabolic Patient

Mitchell V. Kaminski Jr., M.D., Robert P. Ruggiero, M.D., and Christopher B. Mills, M.D.

Recognition of protein-calorie malnutrition may be obvious in the patient who presents with a 30% weight loss due to an obstructing esophageal carcinoma or the patient with multiple fistulae and intra-abdominal abcess after major colonic surgery. The established benefit of metabolic support of such patients has been well documented.[1,2] However, the early recognition of malnutrition and identification of the patient population at risk of progressing into a nutritional bankruptcy is a new challenge to the surgeon involved in day to day patient care.

The hypermetabolic state is a normal endogenous response of the individual to various forms of stress (surgery, trauma, infection, multiple organ failure). The degree of hypermetabolism is dependent upon the extent and severity of injury with the spectrum encompassing routine elective surgery (hernia, cholecystectomy) with no change in metabolic rate to the patient with a massive burn when metabolic rate may double (Fig. 1). The metabolic rate will also be influenced by other factors, including fever, pain, and anxiety. The physiologic metabolic response to stress is beneficial and can be life-saving ("flight, fight, fright") when considered in short time spans. When the process becomes prolonged, the induced catabolic state becomes an impediment to normal healing and immune competence. The physiologic catabolic response to severe stress will be discussed as well as the present means of recognizing and dealing with these patients at an early state of malnutrition before they progress into a nutritionally induced "poor surgical risk" category.

### Metabolic Response to Stress

Stress, in the form of trauma, shock, major surgery and pain, causes multiple interrelated changes in the individual. The stressful stimuli pass via afferent fibers to the hypothalamus, resulting in increased autonomic sympathetic activity.[3] This stimulates pancreatic cells, elevating serum glucagon and suppressing serum insulin.[4] There is also adrenal medullary stimulation with resultant epinephrine release. Elaboration of growth hormone is noted as well as ACTH which will result in increased cortisol levels[5] (Fig. 2). The physiologic milieu of these anti-insulin hormones results in proteolysis, gluconeogenesis, lipolysis, ketogenesis and glycogenolysis. This is an immediate response necessary to meet sudden increases in substrate and energy requirements.

The effects of glucagon and the catechols are mediated through the adenylcyclase receptor producing instantaneous changes in metabolism (Fig. 3). Cortisol and growth hormone exert their effect by directly stimulating intracellular protein synthesis of cyclic AMP

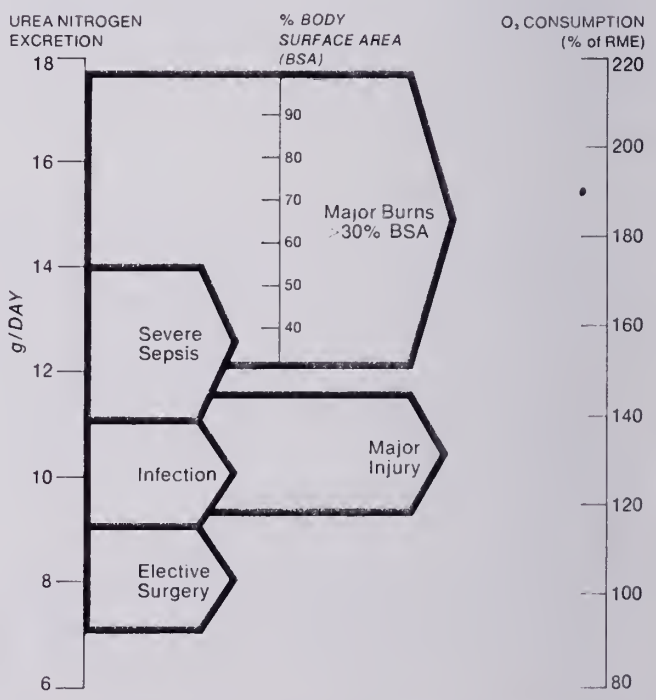


Fig. 1. — Rates of hypermetabolism estimated from urinary urea nitrogen excretion. (Duke, J., et al., Surgery 68.168-174, July 1970. Rutten, P., et al., J. Surg. Res. 18:477-483, May 1975.)

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-dependent enzymes.[6] Thus, their effects upon metabolism are not instantaneous but become maximal within several days.

This catabolic or mobilizing response mediated by the anti-insulin hormones results in proteolysis with release of amino acids which are then used to sustain new protein synthesis and provide carbohydrate intermediates and glucose precursors. Glycogen and fat are mobilized for energy substrate purposes with fatty acids providing two carbon fragments for general tissue energy requirements.

In terms of effect at the adenylcyclase receptor, insulin is superior to the anti-insulin hormones. Thus, the establishment of a hormonal milieu of elevated insulin levels may be of benefit in counteracting the catabolic stress response. Insulin reverses many of the changes ascribed to the anti-insulin hormones, i.e. amino acid influx into muscle will exceed efflux, protein synthesis is increased, glycolysis is stimulated and glycogen repletion occurs (Fig. 4). Free fatty acid and triglyeride uptake will be enhanced with resultant increased fat synthesis.[7] These effects of insulin are also enhanced by the anabolic effects of growth hormone upon protein, if sufficient calories are provided.

## Nutritional Assessment

The recognition of the patient with protein-calorie malnutrition is based on objective measurements. This same assessment profile is then used to follow and document repair of the patient's nutritional status throughout therapy. Unfortunately, all too frequently the malnutrition documented is an iatrogenic state secondary to prolonged intravenous feeding of hypocaloric glucose solutions. The major objective is to recognize protein-calorie malnutrition at an early stage and to provide the stressed individual with sufficient protein and energy substrates to assure optimal response to therapy, support recovery, and decrease morbidity and mortality.

The patient's protein status, not his fat or glycogen stores, directly affects his ability to respond to stress; therefore, nutritional assessment focuses on the protein compartments, both somatic (muscle) and visceral (all other proteins).[8] Several indices are measured for each compartment (Fig. 5).

## Somatic Protein Compartment

1. Body Weight—This should be recorded on the basis of actual weight and not the patient's assumed weight. Measured against ideal height /weight tables (Table 1), the percent ideal weight may be calculated.
   This, and the percent change in weight are extremely important. Patients with an unintentional 15% to 20% loss of body weight prior to

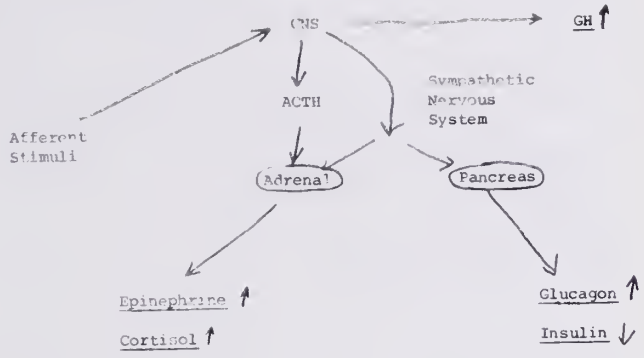


Fig 2. — Neuroendocrine mediators of the stress response.

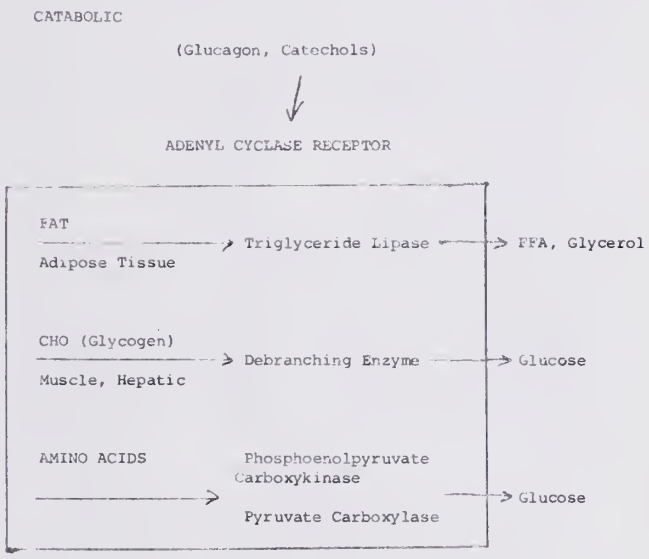


Fig. 3. — Substrate availability (catabolic hormonal milieu).

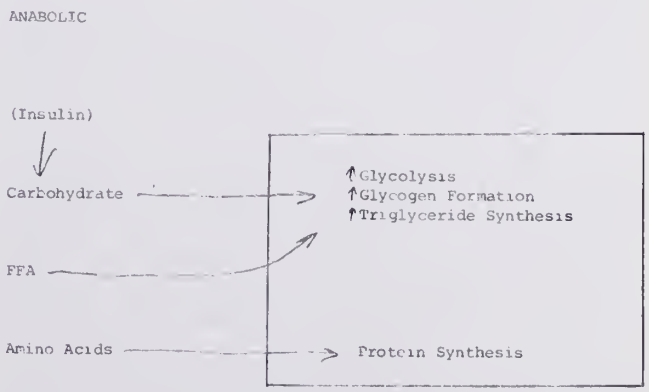


Fig. 4. — Anabolic effects of insulin.

| ANERGIC METABOLIC PROFILE | | | | | |
|---|---|---|---|---|---|
| PATIENT | | ROOM | | | |
| DATE | | DEFICIT | | | |
| Parameters | Value | Severe | Mod | Mild | Adequate |
| SOMATIC PROTEINS | | | | | |
| WEIGHT/HEIGHT | | | | | |
| TRICEPS SKINFOLD mm | | | | | |
| ARM MUSCLE CIRCUMFERENCE cm | | | | | |
| CREATININE/HEIGHT INDEX | | | | | |
| | | | | | |
| VISCERAL PROTEINS | | | | | |
| ALBUMIN | | | | | |
| TRANSFERRIN | | | | | |
| TOTAL LYMPHOCYTE COUNT | | | | | |
| | | | | | |
| CELL MEDIATED IMMUNITY | | | | | |
| | | | | | |

MARASMUS

KWASHIORKOR

NITROGEN IN gm/day ____
NITROGEN OUT gm/day ____
NITROGEN BALANCE gm/day ☐

| NUTRITIONAL STATUS | DEGREE |
|---|---|
| ☐ ADEQUATE | ☐ NONE |
| ☐ MARASMUS | ☐ MILD |
| ☐ KWASHIORKOR | ☐ MODERATE |
| ☐ MARASMUS–KWASHIORKOR MIX | ☐ SEVERE |

| Standards | Severe | Moderate | Mild |
|---|---|---|---|
| SOMATIC PROTEINS | | | |
| –% DEFICIT | > 30% | >15-30% | > 5-15% |
| ALBUMIN (gm%) | < 2.5 | <3.0-2.5 | < 3.5-3.0 |
| TRANSFERRIN (mg%) | < 160 | <180-160 | < 200-180 |
| LYMPHOCYTE COUNT | < 900 | <1500-900 | < 1800-1500 |
| CELL MEDIATED IMMUNITY – mm | < 5 - 0 | <10-5 | < 15-10 |

**Fig. 5. — The anergic metabolic profile (AMP).**

elective surgery should undergo some form of metabolic support before proceeding with surgery. Preoperative weight loss of greater than 20% has been associated with a mortality of 33% in patients undergoing gastric surgery for peptic ulcer disease.[9]

2. Muscle Mass and Fat Stores—Specific estimates of the somatic muscle compartment are made from the creatinine height index and anthropometric measurements of the upper arm.
   A. Triceps Skinfold (TSF)—This is a measure of fat stores (nonprotein caloric reserves) determined with calipers by pulling the skin away from the triceps muscle.
   B. Arm Muscle Circumference (AMC)—This is an estimation of muscle mass which is calculated from mid-arm circumference (MAC) using the formula (MAC) — (0.314 x TSF) = AMC. The result is then compared to standards (Table 2).
   C. Creatinine/Height Index (CHI)—This is a sensitive measurement of the somatic compartment based on the constant efflux of creatinine from all active muscle.[10] When compared to ideal height tables (Table 1), a percent deficit is calculated.

### Visceral Protein Compartment

1. Serum Albumin and Transferrin—Deficits in these two serum proteins reflect an impairment in hepatic synthesis due to limited substrate supply, as in malnutrition or the postoperative state.
2. Immune Competence—
   A. Total Lymphocyte Court = Total WBC x % $\frac{\text{lymphocytes}}{100}$
   B. Cell Mediated Immunity—The patient's T-lymphocyte function is assessed weekly by measurement of the area of induration resulting from intradermal injection of mumps, *candida*, PPD and SK/SD. Immune competence is characterized by a reaction of 10 mm induration to one or more antigens.
   As with the somatic proteins, a 5% to 15% deficit is considered mild, a 15% to 30% deficit moderate, and a deficit over 30% severe (Table 3).

Once the nutritional assessment is performed and the need for metabolic support is determined, these same criteria are followed to assess the patient's response and document the efficacy of the nutritional therapy. Weekly nitrogen balance studies should be performed, which involves a 12 or 24 hour urine specimen with a determination of urinary urea nitrogen:

$$\text{NITROGEN BALANCE} = (\text{nitrogen in}) - (\text{nitrogen out})$$

$$= \frac{\text{Protein intake gm/24 hours}}{6.25} - (\text{UUN} + 3)$$

UUN = gm urinary urea nitrogen/24 hours
3 = consideration for other nonurea nitrogen loss

The hypermetabolic patient with no deficit to repair would be managed with the goal of a nitrogen balance of -1 to +1. In attempting deficit repair, a nitrogen balance of +4 to +6 is the goal of therapy. If balance studies are in a range of less than -2, the planned therapy must be reevaluated and appropriate changes made.

The basic challenge for the surgeon is to recognize those patients who present for elective surgery with a nutritional deficit. The nutritional assessment can be

**Table 1. — Ideal Weights and Creatinine/Height Indices**

| Height ft | in | cm | lb | 06 Medium Frame Ideal Weight kg | Total MG Creatinine 24 Hrs | MG Creatinine/CM Body Ht/24 Hrs |
|---|---|---|---|---|---|---|
| 4′ | 10″ | 147.3 | 101.5 | 46.1 | 830 | 5.63 |
| 4′ | 11″ | 149.9 | 104 | 47.3 | 851 | 5.68 |
| 5′ | 0″ | 152.4 | 107 | 48.6 | 875 | 5.74 |
| 5′ | 1″ | 154.9 | 110 | 50 | 900 | 5.81 |
| 5′ | 2″ | 157.5 | 113 | 51.4 | 925 | 5.87 |
| 5′ | 3″ | 160 | 116 | 52.7 | 949 | 5.93 |
| 5′ | 4″ | 162.6 | 119.5 | 54.3 | 977 | 6.01 |
| 5′ | 5″ | 165.1 | 123 | 55.9 | 1006 | 6.09 |
| 5′ | 6″ | 167.6 | 127.5 | 58 | 1044 | 6.23 |
| 5′ | 7″ | 170.2 | 131.5 | 59.8 | 1076 | 6.32 |
| 5′ | 8″ | 172.7 | 135.5 | 61.6 | 1109 | 6.42 |
| 5′ | 9″ | 175.3 | 139.5 | 63.4 | 1141 | 6.51 |
| 5′ | 10″ | 177.8 | 143.5 | 65.2 | 1174 | 6.60 |
| 5′ | 11″ | 180.3 | 147.5 | 67 | 1206 | 6.69 |
| 6′ | 0″ | 182.9 | 151.5 | 68.9 | 1240 | 6.78 |

WOMEN

| Ft Height | In | cm | lb | Medium Frame Ideal Weight kg | Total MG Creatinine | MG Creatinine/CM Body Ht/24 hrs |
|---|---|---|---|---|---|---|
| 5′ | 2″ | 157.5 | 124 | 56 | 1288 | 8.17 |
| 5′ | 3″ | 160 | 127 | 57.6 | 1325 | 8.28 |
| 5′ | 4″ | 162.6 | 130 | 59.1 | 1359 | 8.36 |
| 5′ | 5″ | 165.1 | 133 | 60.3 | 1386 | 8.40 |
| 5′ | 6″ | 167.6 | 137 | 62 | 1426 | 8.51 |
| 5′ | 7″ | 170.2 | 141 | 63.8 | 1467 | 8.62 |
| 5′ | 8″ | 172.7 | 145 | 65.8 | 1513 | 8.76 |
| 5′ | 9″ | 175.3 | 149 | 67.6 | 1555 | 8.86 |
| 5′ | 10″ | 177.8 | 153 | 69.4 | 1596 | 8.98 |
| 5′ | 11″ | 180.3 | 158 | 71.4 | 1642 | 9.11 |
| 6′ | 0″ | 182.9 | 162 | 73.5 | 1691 | 9.24 |
| 6′ | 1″ | 185.4 | 167 | 75.6 | 1739 | 9.38 |
| 6′ | 2″ | 188 | 171 | 77.6 | 1785 | 9.49 |
| 6′ | 3″ | 190.5 | 176 | 79.6 | 1831 | 9.61 |
| 6′ | 4″ | 193 | 181 | 82.2 | 1891 | 9.80 |

MEN

**Table 2. — Anthropometric Standards**

| | Triceps Skinfold (mm) | Arm Muscle Circumference (cm) |
|---|---|---|
| Male | 12.5 | 25.3 |
| Female | 16.5 | 23.2 |

Percent deficit in anthropometric measurements =

$$100 - \frac{\text{actual value}}{\text{standard value}}$$

**Table 3. — Severity of Visceral Protein Deficits**

| | Severe | Moderate | Mild |
|---|---|---|---|
| Serum albumin (gm%) | < 2.5 | < 3.0 - 2.5 | < 3.5 - 3.0 |
| Transferrin (mg%) | 160 | < 180 - 160 | < 200 - 180 |
| Total lymphocyte count | 900 | < 1500 - 900 | < 1800 - 1500 |
| Cell-mediated immunity | 5mm | < 10 - 5mm | 15 - 10 |

utilized for this purpose. If moderate to severe deficits are noted preoperatively, then nutritional repletion, enteral or parenteral, should be instituted prior to surgical intervention. The malnourished, anergic patient should be aggressively hyperalimented prior to elective therapy to attempt restoration of immune competence and initiate repair of noted deficits. If no preoperative nutritional deficit is determined, then postoperative nutritional assessment must be considered if the postoperative course is prolonged in any way. The patient who is unable to resume full oral intake by five to seven days postoperatively would certainly be a candidate for repeat nutritional assessment and support.

Beyond this point of five to seven days, the hypermetabolic, catabolic response in conjunction with starvation (inadequate protein-calorie intake) leads to a progressive deterioration of protein reserves with

impairment of would healing and immunologic response. Inadequate protein-calorie intake may also be complicated by factors such as fever and infection which increase metabolic demands above those necessary for normal recovery. One should refrain from the natural tendency to delay "one more day" in these patients because this only increases the patient's nutritional deficit.

The use of small feeding tube jejeunostomies, as advocated by Page et al,[11] is one method of nutritional support which should strongly be considered in patients undergoing major intra-abdominal procedures which may preclude oral alimentation for some time (e.g. esophagogastrectomy, pancreatoduodenectomy, total gastrectomy). Early resumption of enteral alimentation with elemental diets in these patients is based on the rapid return of small bowel mobility and absorption in the postoperative period while gastric and colonic adynamic ileus persist. This method allows administration into the upper gastrointestinal tract with maximal absorption in the small intestine.

The desired volume of 100-125 cc/hour is achieved over a three day period at 10% wt/vol concentration with an additional three days to achieve full concentration of 25% wt/vol. The peripheral intravenous support may be discontinued on the second postoperative day allowing greater patient mobility with fluid and electrolyte needs being administered via the jejeunostomy. The established access to the small bowel allows prolonged enteral support, should this be required. Once full oral alimentation is resumed, the jejeunostomy catheter may be left in situ for nutritional support during projected chemotherapy or radiotherapy.

## Infection as Stress: Nutritional Support

Any patient who is recovering from major intra-abdominal surgery is a potential candidate for the development of infection and sepsis with associated severe hypermetabolism. This is manifested by a 40% to 60% increase in metabolic rate due to sepsis and the febrile response. An aggressive approach to nutritional support of these patients is strongly encouraged because of the marked proteolysis which occurs as a result of increased substrate and energy needs.

The introduction of a foreign body, the central catheter, has been a "theoretical" hindrance to nutritional support of the septic patient. In reality, this is not a problem when one adheres to rigid protocol in catheter insertion and aftercare. Septicemia with endogenous contamination of the catheter is much less common than the catheter sepsis induced by deviation from strict aseptic technique. The danger of inadequate nutritional support in these septic patients far outweighs the potential hazard of an intravenous foreign body.

Nutritional support of the severely septic patient requires careful monitoring of blood glucose levels with exogenous insulin supplementation as necessary. Prolonged hyperglycemia in a range above 200 mg% appears to increase susceptibility to fungus infection in the debilitated patient, especially if broad spectrum antibiotics have been administered.

Marked hyperglycemia can lead to glucosuria with resultant hyperosmolarity, dehydration and death if unchecked. This may occur because of the unique "insulin resistance" of sepsis with decreased glucose uptake by skeletal muscle, despite the presence of hyperglycemia and hyperinsulinemia. The "insulin resistance" mainly effects skeletal muscle, leading to a localized tissue-energy deficit, which is compensated by direct oxidation of branch-chain amino acids within muscle (Fig. 6).

Transamination results in increased serum levels of alanine, lactate and glycerol which induces increased hepatic gluconeogensis not suppressed by low levels of glucose infusion (dextrose 5%).[12] Thus, sepsis results in a localized muscle energy deficit, producing hyperglycemia and hyperinsulinemia.[13] This endogenous hyperglycemia in conjunction with glucose in parenteral hyperalimentation solutions can then be compounded by peripheral resistance to the action of insulin. This is the framework which, if not closely monitored and treated, can easily lead to hyperglycemic, hyperosmolar, nonketotic dehydration. The increased insulin requirements of the septic patient should not deter one from the use of parenteral

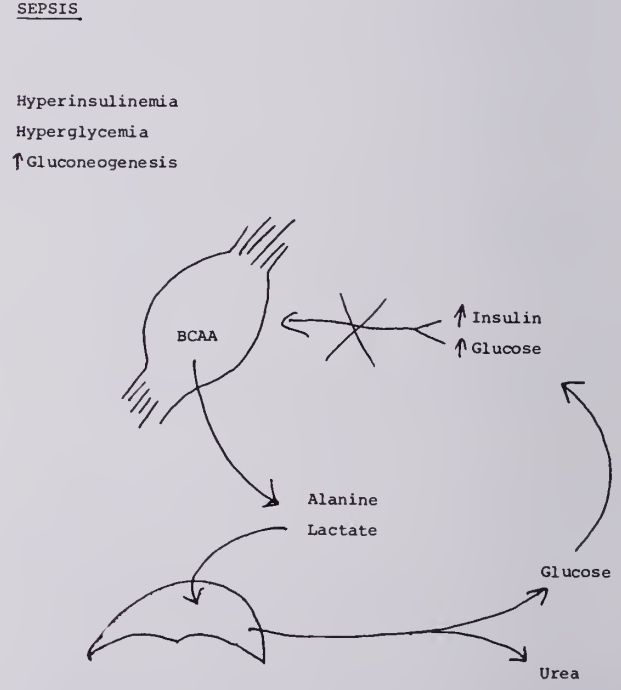


**Fig. 6. — Schematic representation of substrate changes associated with sepsis.**

nutrition but rather be accepted as a metabolic derangement in these critically ill patients which need close monitoring.

Once therapy has been directed against the septic focus (abcess drainage, antibiotic therapy) and the patient has entered a period of convalesence with cessation of the septic hypermetabolic state, the need for nutritional support remains of paramount importance. The protein deficits associated with the hypermetabolic state will persist after fever lysis. With the patient in the recovery phase of illness, an aggressive approach to nutritional repletion is warranted to repair these deficits and restore immune competence. The goal is to return the patient rapidly to an immune competent state whereby he will be capable of handling any further septic insults which may occur during the remainder of hospitalization.

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# Dietary Management of Gastrointestinal Disorders


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Transit, digestion and absorption of food represent a complex interplay of mechanisms by which the body alters food into suitable form to permit its utilization. Conversely, food may alter the body by its effects on the gastrointestinal tract. In the daily exercise to maintain adequate nutrition and satiation, man constantly is exposing himself to a variety of nutritious and non-nutritious chemical agents. Gastrointestinal dietotherapy is designed to direct the patient to a proper diet to promote health and prevent injury. This may consist of the avoidance of foods that in certain persons may cause illness, or alternatively, dietotherapy may be used as a guide to certain eating habits that likely will improve intestinal function.

For years many foods have enjoyed an almost revered position in the therapy of a variety of bodily dysfunctions. In this discussion we will review the influence of certain dietary factors upon some of the more common gastrointestinal disorders. Appropriate mention will be made of the physiology involved to permit an understanding of the interactions of food and gastrointestinal dysfunction. Lactose intolerance and gluten sensitive enteropathy have been directly linked to factors found in normal diets and will be discussed in more detail. In addition, problems with dietary oxalate, fiber and factors that possibly influence the incidence of gastrointestinal malignancies will be discussed. Finally, several traditional beliefs concerning effects of diet on peptic ulcer and gallbladder disease will be discredited based on recent clinical research.


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## Lactose Intolerance

One of the most common gastrointestinal disorders related to diet is lactose intolerance. Lactose is a disaccharide composed of glucose and galactose. The sole source of lactose in nature is the milk from the mammary glands of placental mammals. Cow's milk contains about 5 grams and human milk about 7 grams of lactose per 100 ml. One quart of cow's milk, therefore, contains about 50 grams of lactose. Lactose in the American diet totals about 10% of the average daily carbohydrate intake.

In the human, lactase is the enzyme that hydrolyzes each molecule of lactose to one molecule of glucose and one molecule of galactose. Lactase is present in the so-called brush border covering the luminal surfaces of the mucosal cells. In mammals other than man, lactase activity is highest at term and decreases rapidly at the time of weaning. High incidences of lactose malabsorption have been found in the populations of eastern Asia, the Pacific, black Africans, Jews, Italians, Arabs and Blacks in the United States.[1] For example, over 70% of black Americans are lactase deficient. Only about 30% or less of the people from Northern Europe are intolerant of lactose. Besides the genetic predisposition to lactose intolerance, there are a variety of diseases of the gastrointestinal tract which may be accompanied by acquired lactose malabsorption. These include some forms of gastroenteritis, malnutrition, fibrocystic disease of the pancreas, tropical and nontropical sprue and giardiasis.[2] These diseases may lead to a temporary lactase deficiency and improve after the predisposing condition is resolved.

Persons with significant lactose intolerance often will be symptomatic with the ingestion of small amounts of lactose, usually that present in an eight ounce glass of milk (about 12 grams.)[3] They typically complain of abdominal distention, flatulence and diarrhea. These symptoms can be explained wholly by the osmotic effects and bacterial fermentation of undigested lactose remaining in the lower gastrointestinal tract. If no lactase is present, lactose, an osmotically active disaccharide remains in the gut lumen. The osmotic effect of the unhydrolyzed lactose results in a net fluid accumulation or volume overload in the small intestine. This fluid excess results in osmotic diarrhea.

In addition to the osmotic effect, lactose malabsorption may cause symptoms in two other ways. When the unabsorbed lactose enters the colon, it is fermented by the microflora causing a reduction in the colonic pH and the liberation of hydrogen and carbon dioxide gases. Most of the hydrogen is eliminated as flatus. A similar process is the cause of the increased flatus from beans which contain the sugars raffinose and stachyose. Since the gut of man contains no enzyme capable of hydrolyzing these substances, the resulting fermenting process causes gas production and a reduction in the pH, which leads to an increase in circular muscle activity and rapid propulsion of osmotically derived fluid.

The diagnosis of lactose malabsorption usually can be suspected from the symptoms and knowledge of the patient's ethnic background. Confirmation may be made with a lactose tolerance test. A dose of 50 gm/$M^2$ for children or 50-100 grams lactose for adults is ingested and the blood glucose is determined at 0, 15, 30, 60 and 90 minutes. A rise of less than 20 mg/100 ml of serum glucose plus occurrence of symptoms is presumptive evidence of lactase deficiency. The test assumes a normal mechanism for the absorption of glucose and galactose. The demonstration of reduced lactase activity in a small intestinal mucosal biopsy is considered the most reliable test, but is presently available only in research laboratories.

The easiest treatment for a patient with symptomatic primary lactose intolerance is complete withdrawal of lactose from the diet, since the symptoms do not seem to correlate well with the amount of lactose consumed. To date, it has not been possible to induce an increase in lactase activity in either lactase deficient or normal individuals. The frequency of lactase deficiency and the value of lactose-free diets have not been appreciated by the medical profession at large, even among populations where lactase deficiency is common. In a recent survey, only 42% of hospitals reported even having lactose restricted diets in their diet manuals.[4] Occasionally the use of chocolate milk may improve symptoms. Chocolate milk has a higher osmolality than plain milk because of its sucrose content, and empties from the stomach at a slower rate. If the use of milk is felt necessary for its nutritional value, such as in school lunch programs, the lactose may be hydrolyzed before ingestion by the addition of lactase. Studies have shown that a commercially available lactase enzyme (Lact-Aid®), derived from yeast, may be used to hydrolyze the lactose in milk before ingestion, and thereby lessen the symptoms and signs of lactase deficiency.[5]

## Gluten Sensitive Enteropathy

Gluten sensitive enteropathy, or celiac sprue, is a well-known but uncommon disease with a direct relationship to the diet. It has an incidence of 1 in 2000-3000 births, with a slight predominance in women. Affected persons are sensitive to dietary gluten, which is found in wheat, barley and rye. The toxic substance in gluten is gliadin. When this substance comes into contact with the small bowel mucosa of a sensitive individual it produces severe mucosal changes. These changes are characterized by atrophy of the mucosal villi, hyperplasia

of the cells of the mucosal glands and lymphocytic infiltration in the lamina propria. The mechanism of toxicity is unknown, although there are indications that gliadin activates an endogenous mechanism of toxicity, probably mediated through the immunological system.[6]

Common manifestations include steatorrhea, diarrhea, weight loss and malnutrition. Symptoms also may include vague abdominal pain and distention or bloating. Some persons may not complain of gastrointestinal symptoms but rather present with difficulties arising from consequence of malabsorption. They may have bleeding due to clotting abnormalities, edema related to hypoprotenemia and protein-losing enteropathy, develop severe peripheral neuropathy, anemia due to iron, folic acid or B-12 deficiency, hypocalcemia causing tetany, bone pain associated with osteomalacia or with hypokalemia leading to nephropathy. The clinical picture may be confusing since the classical malabsorption syndome with multiple manifestations may be absent and steatorrhea may be detectable only by chemical tests.Small intestine mucosal biopsy findings are supportive but are not specific for this entity.

The mucosal atrophy leads to malabsorption of many nutrients. Fat is poorly absorbed because of mucosal atrophy as well as asynchrony between meal transit, gallbladder emptying and pancreatic secretion.[7] Carbohydrate malabsorption is present due to a universal decrease in brush border disaccharidase activity and reduced absorptive surface area. In those improved by gluten-free diet, lactase deficiency may persist and clinical symptoms may follow milk ingestion. Protein abnormalities occur as a result of both impaired absorption, and increased fecal loss. Inadequate protein digestion may result from impaired enzyme release from the pancreas. Brush border proteolytic enzymes (oligopeptidases), responsible for the breakdown of small peptides, are present in decreased concentrations. Increased fecal protein is due partially to undigested dietary protein, and the loss of protein secreted into the bowel in the form of enzymes.

Since the causative substance in celiac disease is the gliadin component of gluten found in wheat, barley and rye, treatment is aimed at totally removing these substances from the diet. Strict adherence to a gluten-free diet should result in improvement in symptoms and gradual return of the histologic pattern to normal. Improvement may be expected in a few weeks but a longer time is required in some. The avoidance of gluten-containing foods may sound simple but is relatively difficult due to the ubiquitous nature of rye, barley and especially wheat flour in the normal American diet. Wheat flour is found in some brands of instant coffee, mustard and candy bars and is used as an extender in many processed foods such as ice cream, salad dressing and canned goods. Even if the patient has a satisfactory response to gluten withdrawal, lactase deficiency and subsequent lactose intolerance may continue. If a patient does not respond to confirmed gluten withdrawal, the diagnosis must be questioned since similar histologic findings may be found in a variety of other diseases.

## Enteric Hyperoxaluria

It has been known for some time that patients with several types of bowel disease are prone to develop kidney stones. Recently it has been shown that stones composed primarily of oxalate are characteristic of these intestinal diseases.[8] In the normal state, much of the dietary oxalate combines with calcium in the gut to form insoluble salts which cannot be absorbed. In some patients with terminal ileitis (Crohn's disease), after jejunoileal bypass surgery or following extensive distal small bowel resection, steatorrhea may result from bile acid malabsorption. In this instance the unabsorbed fat combines with dietary calcium to form insoluble soaps and calcium is then not available to form insoluble complexes with dietary oxalate. This situation leaves the oxalate in a soluble form which readily may be absorbed. It has been shown that there is a linear correlation between fat malabsorption, oxalate absorption and urinary oxalate excretion. The increased oxalate absorption leads to an increase in urinary oxalate excretion which predisposes to nephrolithiasis.

Therapy for enteric hyperoxaluria includes the reduction of steatorrhea by restricting dietary fat and/or the administration of calcium to bind oxalate as insoluble calcium oxalate. Hypercalcemia has not been a problem since most of the additional calcium is bound to malabsorbed fatty acids or oxalate and excreted in the stool. Aluminum hydroxide gels also may be given to bind oxalate and decrease its absorption.

The average diet contains about 100 mg of oxalate daily. Most of this comes from vegetable sources and breads because animal products are low in oxalate. The amount of ingested oxalate can be lowered by a low oxalate diet.[9] This includes avoidance of tea, cocoa, leafy green vegetables and products made with unbleached flour. Reduction of fat and oxalate ingestion, plus administration of calcium supplements to bind oxalates in the lumen, provide the only means for controlling oxalate renal stone formation in the previously mentioned gastrointestinal disorders.

## The Role of Dietary Fiber

Fiber is considered an undigestible material which to the extent it escapes bacterial digestion is eliminated unchanged in the stool. Fiber is a combination of several substances, including cellulose, lignin, hemicellulose and

pectin. Cellulose is a complex polysaccharide derived from cell walls of plant tissues. It is not digested by any enzyme in the human intestine. In most foods crude fiber content corresponds well with their cellulose content. Lignins make up the principal part of the woody structures of plants but unlike cellulose are not carbohydrates. Lignin acts in the gut like an ion exchange resin combining with bile acids and other substances to form insoluble complexes which are not absorbed. The hemicelluloses are a large group of complex polysaccharides which form mucilages and gums. Pectin also is present and is similar to the hemicelluloses. It is frequently mixed with kaolin for the treatment of diarrhea.[10]

It is known that stool weight is proportional to the amount of fiber in the diet. Most American city dwellers have a formed and relatively hard daily stool weighing about 100-200 grams. Feces of rural Africans, eating native diets, is soft, formless and weighs about 400 grams daily. The addition of increased fiber to the diet will increase fecal weight and stool frequency. Since the increase in fecal weight is greater than the weight of the fiber added, much of the increased weight is the result of water entering the gastrointestinal tract. It has been shown that as fecal weight increases, the intestinal transit time diminishes. The transit time for Europeans is about 80 hours, whereas for African villagers, it is about 35 hours.[11]

Knowledge of the effects of increased dietary fiber has resulted in its use for a variety of conditions. In some patients with ileal disease or distal ileal resection, who are unable to absorb bile salts normally, increased fiber has been shown to bind bile salts and reduce the diarrhea caused by bile salt stimulation of the colon.[12] High dietary fiber intake in persons with an intact and normal ileum may reduce serum cholesterol levels. The dietary fiber-bile salt complexes formed in the small intestine result in reduced bile salt absorption in the terminal ileum. This leads to a reduction in the body's bile salt pool. Since bile salts are made from cholesterol the decreased bile salt pool causes more cholesterol to be converted to bile salts. The result of this response is a lowering of the serum cholesterol in an attempt to increase the bile salt pool.

Several epidemiologic studies and observations by many clinicians have demonstrated the salutary effects of increasing dietary fiber on colon evacuation and symptoms of chronic constipation, irritable colon symdrome and diverticular disease of the colon. A high-fiber diet is safe, simple, inexpensive and has a rational basis. Current opinion among gastroenterologists is that a normal diet high in fiber does promote a more regular bowel evacuation and likely reduces the incidence of common lower bowel disorders such as constipation, hemorrhoids and diverticulosis of the colon.[13]

The average American consumes 4-5 grams of crude fiber daily. The easiest way to increase this amount is to add more fruits, vegetables, and especially cereals to the diet. A high fiber diet is most easily accomplished by increased use of unprocessed bran, cereals with high fiber content, whole wheat bread, fresh fruits, nuts and vegetables. The richest source of fiber among ordinary foods is unprocessed wheat bran which contains 11% crude fiber. Several commercially available cereals (Kellogg's All-Bran, All-Bran Buds or Nabisco 100% Bran) provide about 1-2 grams of crude fiber per ounce (one-half cup). Unprocessed or miller's bran is now available in grocery and health food stores. One rounded teaspoon of unprocessed bran contains 2.4 grams of fiber and may be taken with fluids, added to cereals or used in baked goods. The average daily diet should contain 12-15 grams of fiber, i.e. six rounded teaspoons of unprocessed bran or its equivalent in other sources of fiber.

The old belief that low fiber or low residue diets are best for patients with diverticular disease of the colon and irritable bowel syndromes has no current support and in our opinion these diets should no longer be used as therapy for these conditions.

### Diet and Gastrointestinal Malignancies

In recent years it has been realized that many malignancies of the gastrointestinal tract show marked regional and worldwide variation. These observations have led investigators to speculate that environmental factors may initiate or contribute to a variety of neoplasms. There is now increasing evidence that the diet that man consumes may in some way be related to the pathogenesis of gastrointestinal malignancies. Current evidence relates colon cancer, the most common gastrointestinal malignancy in the United States, to dietary factors. There is also epidemiologic evidence linking diet to cancer of the stomach, liver, pancreas and esophagus.[14]

Burkitt observed that Africans had a high daily intake of fiber and a low incidence of colon cancer.[11] He attempted to correlate the 90% reduction of dietary fiber in the United States and England between 1890 and 1960 with the rise in colon cancer. His observations suggested that the decrease in stool bulk and frequency associated with the diet in developed countries correlated with an increase in cancer of the large bowel.

Several mechanisms of action have been suggested to explain how dietary fiber might have an effect on the incidence of colon cancer.[15] First, fiber shortens the transit time and thus reduces the duration of exposure of

the mucosal cells to possible carcinogens in the lumen. Fiber may alter bile salt metabolism in such a way as to decrease the formation of potential carcinogens. This may be done by binding bile salts, cholesterol and its degradation products and augmenting excretion of sterols, which are structurally similar to known carcinogens. Bulking properties of fiber may also dilute potential carcinogens. Animal studies show that the high fiber diet correlates with reduced activity of certain enzymes that can promote the formation of potent carcinogens. Increased dietary fiber causes a change in the intestinal bacterial flora which may result in less degradation products of bile salts that may have potential carcinogenic effects. The studies supporting the postulated relationship between dietary fiber and colon cancer rest on epidemiologic grounds, have no experimental proof and therefore must be regarded as unproven.

Although the relationship between dietary fiber and colon cancer may not be convincing, other dietary influences have stronger scientific support. A positive correlation between daily consumption of meat and colon cancer has been noted in the analysis of statistics from 23 countries. The critical factor appears to be a positive correlation with consumption of animal fat. In studies of Japanese immigrants to Hawaii, the incidence of colon cancer rises as migrants abandon the practice of eating at least one Japanese-style low meat meal each day. The rise in meat consumption paralleled the increased incidence of bowel cancer in Japanese immigrants.

Studies have shown that people on a mixed Western-type diet, in which the incidence of colon cancer is high, degraded and excreted acid and neutral sterol metabolites to a greater degree than people with a low rate of colon cancer. Patients with familial polyposis excrete significantly more bile acids and cholesterol in their feces than do controls.

Gastric cancer has a widely varying incidence in mortality depending on the country of residence.[14] In countries where there is a high incidence of gastric cancer, there is usually a low incidence of colon cancer. In Japan and Finland the high rate of gastric cancer is associated with high smoked fish consumption. Additionally, low intake of fat and micronutrients (vitamins and minerals) such as vitamin A have been identified in these high risk populations. The common factor seems to be a high carbohydrate diet and a low consumption of fat, fresh fruit, vegetables and probably micronutrients. Another factor implicated in cancer of the stomach is the ingestion of nitrites. It has been shown that nitrosamines, which are known gastric carcinogens in animals, can be formed in the human stomach from nitrites and suitable substrate amines. Nitrite is used as a food additive in meat and fish to inhibit spores of clostridial bacteria (botulism). Fish preserved by salting may contain nitrites which can form nitrates. In Chile and Colombia with high death rates from gastric cancer, there are large nitrate deposits believed related to correspondingly high levels of nitrates in food and drinking water. Nitrate production can be inhibited by proper refrigeration and vitamin C. It has been suggested that the reduction of gastric cancer in the United States is due to widespread introduction of refrigeration and the increased availability of fresh fruits.

To a lesser degree, cancers of other parts of the gastrointestinal tract may correlate with dietary influences. Several studies have shown that extensive use of alcohol significantly increases the risk of cancer of the esophagus in smokers. In the rare Plummer-Vinson syndrome, there is also a strong association of iron deficiency and cancer of the mouth, hypopharynx or upper esophagus. It has been postulated that riboflavin deficiency, which may accompany both alcoholism and iron deficiency, also may be an etiologic factor in this syndrome.

Even though the relationship of diet and gastrointestinal cancer is unproven, it is thought that certain dietary precautions should be followed. The "prudent diet" for a person without specific diet-related disorders calls for a reduction of fat calories in the average American diet from its present 44% to 35% or less, and cholesterol to less than 300 mg per day. Adequate protein should be included and efforts should be made to minimize alcohol intake. Although the exact role of fiber in gastrointestinal malignancies is unknown, it would probably be wise to eat a diet high in fiber content to at least improve intestinal transit and colonic evacuation and thereby probably lessen problems related to constipation, hemorrhoids and diverticulosis of the colon.

## Peptic Ulcer Disease

Much confusion remains concerning dietary measures useful in the treatment of peptic ulcer disease. This has in part been fostered by opposing views (neither based on controlled studies) given in major textbooks on internal medicine and gastroenterology. There is no scientific proof that a "strict" Sippy-type or bland diet promotes ulcer healing. Several studies have shown that slightly modified or regular diets produce radiological healing or relief of symptoms as well as bland diets in patients with duodenal or gastric ulcers.[16] In accordance with these studies the American Dietetic Association in a 1971 paper stated that an individualized regular diet with few restrictions should be used for people with duodenal ulcer disease.[17] Despite this modern approach adopted both gastroenterologists and the ADA, a recent survey

showed that some type of bland diet is still used in 77% of hospitals.[16] This practice is indicative of a hesitancy to give up ineffective, traditional treatments that have no proven benefit. Tea, coffee or carbonated beverages have been shown to stimulate gastric acid secretion and it is therefore still recommended that restriction of caffeine-containing beverages such as coffee, tea or carbonated drinks is a reasonable though unproven therapeutic gesture for peptic ulcer disease. Unfortunately, and contrary to popular belief, decaffeinated coffee has been shown to stimulate gastric acid secretion probably as much as regular coffee.[18] A bedtime snack may stimulate gastric acid secretion at night when the patient is not awake to take antacids and therefore should be avoided.

Milk, although frequently recommended to ulcer patients, is a poor acid neutralizer and may result in acid rebound. The protein and calcium content of milk are potent stimulants for gastric acid secretion and probably are responsible for this acid rebound effect after the neutralizing effect of milk wanes.

Alcohol has been shown to alter the gastric mucosal barrier but it does not stimulate acid production by the human stomach. Therefore it is best avoided in a patient with peptic ulcer disease since the alteration in the mucosal barrier may potentiate the ulcer diathesis.

None of the traditional dietary measures used for peptic ulcer disease appear to have any proven effect on ulcer healing. Therefore, we recommend that the bland diet, frequent feedings, bedtime snacks and milk not be used as a treatment for gastric or duodenal ulcer diseases. The best diet therapy appears to be a regular, well-balanced diet containing calories appropriate to maintain or achieve ideal body weight. Physicians also should be aware of recent advances in the drug therapy of peptic ulcer diseases, including proper antacid dosage and a histamine-2 receptor antagonist.

## Galbladder Disease

Generations of physicians have been taught that obesity is a common accompaniment of gallbladder disease. Recent studies show that the incidence of cholesterol cholelithiasis is increased in obese patients as compared to controls of normal body weight.[19] Despite the fact that most gallstones in this country are believed to result from cholesterol supersaturation of the bile, a diet low in cholesterol does not prevent their formation. In fact, in a group of male patients with coronary artery disease treated with a lipid-lowering low cholesterol diet, the incidence of gallstones was actually greater than in controls.[20]

Other dogma concerning gallbladder disease is that fatty foods will increase symptoms. It is true that when fat reaches the duodenum it causes the release of the hormone cholecystokinin which causes gallbladder contraction. However, except for individual intolerances, there is no justification, based on presently available data, for patients with cholelithiasis to avoid fatty foods. In patients who report fatty food intolerance, the incidence of gastrointestinal complaints will decrease even though they are given fat in a disguised form.[21] It seems wise then in treating patients with gallbladder disease, as in peptic ulcer disease, that one should strive to maintain or attain ideal body weight by eating three balanced meals a day and avoid only those foods that are known by personal experience to be poorly tolerated.

## Summary

We have reviewed how a limited number of diseases are related to specific dietary patterns. Only two common disorders, lactose intolerance and gluten sensitive enteropathy have been directly linked to common dietary components. Popular diet therapy, such as for peptic ulcer disease and gallbladder disease, have little or no scientific basis. Epidemiologic evidence has strongly linked diverticular disease of the colon and large bowel cancer to dietary factors but scientific proof is lacking. At this time it seems wise to follow a balanced diet to achieve and maintain ideal body weight with a reduction in fat intake and an increase in dietary fiber. Future dietary recommendations, when possible, should be made on the basis of scientific evidence and not tradition.

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# Total Parenteral Nutrition

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**Abstract: Until recently, progressive malnutrition and death were the expected sequelae to anatomical functional loss of small intestinal integrity. Protein calorie malnutrition in patients incapable of oral intake was a difficult, if not impossible, management problem. The outlook for such patients has improved markedly with the recent development of techniques for the intravenous administration of calories, amino acids and fats in amounts sufficient to satisfy basal needs and to compensate for deficits induced by illness or previous malnutrition. The technique of total parenteral nutrition (TPN) by means of insertion of a large-bore catheter into a central vein allows administration of concentrated hypertonic dextrose as part of normal daily fluid requirements and also allows administration of synthetic amino acids, electrolytes, vitamins and micronutrients. TPN is indicated in many illnesses in which nutritional deprivation or catabolism is a prominent feature. Gastrointestinal fistulae, inflammatory bowel disease, massive small bowel resection, severe burns or trauma are a few clinical examples. With adherence to proper technique, the incidence of infection should be low and mechanical, and metabolic complications should be almost nonexistent. The use of lipid emulsions and home TPN (or artificial gut) have added new dimensions to this rapidly expanding field. Parenteral nutrition therapy can reverse catabolism, restore positive nitrogen balance and can, in the critically ill patient, often provide the supportive therapeutic edge to reverse a downhill course. It is considered to be one of the major therapeutic advances in recent years.**

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The need for adequate nutrition is now considered a fundamental tenet in the management of most diseases. In the last decade, total parenteral nutrition has evolved as an important means for accomplishing this goal.

The concept of intravenous alimentation is rooted in antiquity. Sir Christopher Wrenn described the first intravenous infusion in 1656, utilizing a hollow quill to administer various solutions to dogs. Later, Biedl and Kraus administered intravenous nutrition to man for the first time in 1896. By the time of the first World War, infusions of glucose and water were widely utilized. Studies on the use of intravenous proteins were conducted in the 1930's. The use of intravenous fat emulsions became widespread in the 1950's in the United States but their use was prohibited in 1964 because of several toxic side effects. The advances that have led to our modern techniques of total parenteral nutrition were achieved in the 1960's. Wretlind and his colleagues in Sweden developed a safe fat emulsion which made possible parenteral alimentation which could safely be delivered through a peripheral venous route. In 1968 Dr. Stanley J. Dudrick of the University of Pennsylvania reported that parenteral nutrition utilizing hypertonic glucose and protein hydrolysates achieved positive nitrogen balance in postoperative patients.[1] Because of the hypertonicity of the glucose solutions they required infusion via a central vein. The superior vena cava was utilized, via the subclavian vein. The term, "hyperalimentation," was derived from this description of a "hypertonic intravenous alimentation." More recently, the term,

"hyperalimentation," has been used interchangeably with "total parenteral nutrition" especially with solutions delivered centrally.

The aim of the total parenteral nutrition is to provide and maintain adequate nutrition by an intravenous route to patients in whom enteric feedings are inadequate, poorly tolerated, or contraindicated. Enteric feedings should always be utilized when the clinical situation so permits. The goal of therapy is to maintain or achieve the patient's ideal weight or usual weight and to maintain positive nitrogen balance.

The basic principles of total parenteral nutrition (TPN) are: (1) evaluate the individual patient for the advisability of total parenteral nutrition and that individual's particular requirements for parenteral nutrients; (2) establish and maintain an aseptic intravenous route, usually central, using a large-bore catheter for administration of the nutrient solution; (3) infuse nutrient solutions in a concentrated form in order to avoid volume overload; (4) provide sufficient nonprotein calories to insure the utilization of administered amino acids for protein synthesis, and (5) establish a steady-state delivery, i.e., a constant flow rate, in order to minimize fluctuations in the physiological responses to nutrient infusion. One additional principle would appear to be the desirability of a team approach. Several studies have shown that such nutritional support units maximize the benefits of TPN programs and minimize the complications which marred the early results of TPN utilization. Such teams should include a physician with an interest and knowledge of basic nutrition; a pharmacist to aseptically prepare the solutions and provide medical/nutrient interaction information; and a nurse to supervise aseptic technique in placing and maintaining intravenous catheters, monitor infusion of the nutrient solutions and correlate monitoring data for individual patients. Fewer complications in catheter placement appear to result when a select few physicians skilled in this technique regularly provide this service. The involvement of a dietitian provides a valuable input not only from a general nutritional standpoint but also in integrating the transition in diets which occurs when patients do respond to TPN. Additional members of a team are occasionally needed to provide input into the management of individual patients and, sometimes, their complications.

### Indications for Total Parenteral Nutrition

Total parenteral nutrition may be indicated in certain patients of the following groups: gastrointestinal tract disorders; massive burns or severe trauma; cancer patients receiving chemotherapy or radiotherapy; postsurgical patients not expected to receive oral intake for seven days; emaciated or obviously debilitated patients prior to undergoing nonemergency surgery; and infants suffering from respiratory difficulties during feeding and longstanding failure to thrive. A variety of studies have demonstrated the efficacy of total parenteral nutrition in these conditions.[2-5]

The gastrointestinal disorders in which TPN may be of benefit can be classified in two groups. The first are those patients unable to ingest nutrients because of an obstructing lesion or a disorder of motility. The second includes patients with impaired digestion or absorption in whom bowel rest may eventually result in marked clinical improvement secondary to adequate nutrition. In particular, patients with fistulas, inflammatory bowel disease, pancreatitis, diverticulitis and complete bowel obstruction seem to benefit.

Patients with massive burns and trauma are frequently unable to ingest nutrients because of involvement of the anatomy in such a way as to prevent oral feeding. Other patients may simply not be able to ingest sufficient nutrients to meet the requirements imposed in this hypermetabolic state. Wound healing in particular seems to be improved by total parenteral nutrition. Dudrick has shown that burn patients on TPN also evidence less septic complications, enjoy better graft survival and demonstrate accelerated healing.

Although the question of the use of total parenteral nutrition in the management of terminally ill patients with malignancies remains unanswered, TPN does appear to be an important adjunct to both chemotherapy and radiotherapy. Frequently malnutrition may have resulted in loss of immunocompetence in cancer patients; such immunocompetence actually being required for the efficacy of some chemotherapeutic agents. TPN has also been shown to increase the tolerance of some patients to chemotherapeutic agents such as methotrexate and 5-flurouracil which have significant gastrointestinal side effects. Radiation therapy, which frequently results in significant gastrointestinal side effects, is also better tolerated by patients on adequate TPN programs. Additionally, it is believed that TPN is of benefit in cancer patients because of the improvement in the quality of life.

Patients who have not been fed for seven days following surgery or who are expected to have a period of intolerance to oral feedings for greater than two weeks should be considered for TPN. As in previously mentioned groups of patients, it has been shown that such patients enjoy better wound healing and fewer complications than malnourished, debilitated patients. As concerns preoperative patients an effort should be made to delay surgery when anergy or significant protein calorie malnutrition, as evidenced by a measure of the patient's nutritional assessment profile is demonstrated. Meakins and others have demonstrated that such

patients are at a higher risk for complications. It should be noted, however, that with sepsis there is poor utilization of nutrients. Surgery should not be withheld in such patients pending nutritional improvement. Patients in the pediatric age group present additional problems. They require nutrition not only adequate for homeostasis but also to sustain growth.

In general one should consider total parenteral nutrition for patients in the high risk categories mentioned. Any patient who has been, or might be, deprived of adequate oral nutrition for seven or more days or who has had a recent loss of 10% or more of body weight due to inadequate nutrition should also be considered.

### Nutritional Status Evaluation

Prior to implementation of total parenteral nutrition in any patient, a thorough evaluation of that individual's nutritional status should be made. Such evaluations are helpful in assessing the degree of nutritional impairment, need for nutritional support in an appropriate form and the data base against which the results of therapy may be evaluated. Blackburn, Bristrain and colleagues have suggested an extensive protocol which utilizes anthropometric data, laboratory studies and measures of a patient's immunocompetence.[6] They have emphasized the inadequacies of any single test to adequately define any patient's nutritional deficiencies.

Initial assessment should include height and weight which are important indicators of the patient's somatic status. The patient's weight should be compared to his usual weight as well as to his ideal weight for height. The usual reference table for ideal body weight-for-height is presented in the Recommended Dietary Allowances published by the National Research Council. A simple rule for estimating ideal body weights for adults is: (1) for women, allow 100 lbs for the first 5 feet and 5 lbs for each additional inch; (2) for men, allow 110 lbs for the first 5 feet and 6 lbs for each additional inch; (3) allow 10% variation above or below the calculated weight for individual differences. A more definitive measure of lean body mass is the Creatinine Height Index which is calculated by comparing the patient's actual urinary creatinine (mg/24 hr) to an ideal urinary creatinine calculated from ideal body weight. For men of ideal weight for their height, the value is 23 mg/kg/24 hr; for women, the value is 15 mg/kg/24 hr. A greater than 20% deficit indicates nutritional depletion. Other anthropometric measurements which are useful in evaluating the patient's nutritional status include the triceps skinfold, mid-arm circumference and mid-arm muscle circumference. Triceps skinfold allows an estimation of the body's fat reserves. A fold of skin on the posterior aspect of the arm midway between the shoulder and elbow is grasped and pulled gently away from the underlying muscle. Special calipers are then applied to measure the skinfold. For adult males, the standard is 12.5 mm and for females 16.5 mm. The mid-arm circumference is measured on the nondominant arm halfway between the acromial process of the scapula and the olecranon process of the ulna. The usual values for adults are 29.3 cm for males and 28.5 for females. The third anthropometric indicator is calculated from the triceps skinfold and the mid-arm circumference. This is the arm muscle circumference which is an indicator of the level of somatic protein deficit. The relationship is: arm muscle circumference (in cm) equals mid-arm circumference minus (0.314 x triceps skinfold in mm). The usual standards are 25.3 cm for males and 23.2 cm for females. The values obtained from these anthropometric measures are usually presented as percentages of the ideal or standard.

The degree of visceral protein depletion in the malnourished patient may be determined by the depression of secretory proteins and of the cellular immune system. Blackburn and Bistrian have demonstrated that albumin and transferrin are good parameters of visceral protein compartment status. For albumin, a value of 3.5 g/dl is considered normal. A mild impairment is considered to be between 3.5 and 3.0 g/dl; moderate between 3.0 and 2.5, and severe less than 2.5 g/dl. Utilization of this parameter is not valid if albumin has been provided to the patient prior to assessment. Serum transferrin may be estimated from the total iron binding capacity by the formula: transferrin = (0.8 x TIBC) - 43. A result between 200 and 180 mg/dl is considered a mild impairment; between 180 and 160 moderate; and less than 160 severe.

The cellular immune system is evaluated by the total lymphocyte count and delayed hypersensitivity reactions to antigens. A lymphocyte count between 1800 and 1500 per $mm^3$ indicates a mild deficiency; between 1500 and 900 moderate, and less than 900 severe. The usual skin test antigens utilized are PPD, Tricophyton, Candida, Mumps and Streptokinase/Streptodornase. The delayed cutaneous hypersensitivity is evaluated at 48 hours. Normal response is a wheal at least 15 mm in diameter for any one of the skin tests. A result between 10 and 15 mm represents a mild deficiency; between 5 and 10 mm moderate, and less than 5 mm severe immunodeficiency or anergy. Recently, anergy has been correlated with increased morbidity and infection in chemotherapy. The prognosis seems to be improved if the patient retains or achieves immune competence as measured by skin test and poor if an initially immune competent patient becomes anergic or remains anergic.

It is sometimes helpful to classify nutritional deficiencies as marasmus, kwashiorkor or a combined

deficiency state. These estimations of protein calorie malnutrition are readily identified by International Classification of Diseases, Adapted numbers. Nutritional marasmus is characterized by depression of anthropometric measurements and kwashiorkor by decreased visceral protein stores even though anthropometric measures may appear normal. The combined state is a life-threatening form of malnutrition in which both anthropometric and laboratory studies are abnormal.

An additional test which should be utilized in evaluation of the patient's nutritional status is determination of nitrogen balance. Nitrogen intake is estimated by dividing grams of protein consumed by 6.25. The nitrogen output is estimated by a formula based on urea nitrogen excreted during a 24-hour period. A constant of 3 to 4 gm of nitrogen is added to cover the excretion of non-urea nitrogen lost through the skin, in the feces or as non-urea urinary nitrogen. This estimation of nitrogen balance is easily carried out and provides a good estimation of the sufficiency of nutritional support.

Additional baseline laboratory studies should include a complete blood count, differential, platelets and clotting studies. Frequently, abnormalities in these studies may be the first indication of a patient's inadequate vitamin status. Other important laboratory tests would include electrolytes, calcium, phosphate, magnesium and serum iron.

## Nutritional Requirements

The next step in instituting total parenteral nutrition is to establish the nutritional requirements of the individual patient. The caloric requirement for the resting adult patient is 27-30 kcal/kg/day for males and 23-26 kcal/kg/day for women (Recommended Dietary Allowances, 1974). However, these values approximate the requirements for a nonstressed hospital patient at bed rest. Ambulation will increase metabolic expenditures by about 20%. Fever will increase metabolic requirements by 11-13% for each degree centrigrade body temperature elevation. Major stress will increase requirements by up to 20%; peritonitis by 50%; and significant burns by 100%. Jeejeebhoy and colleagues have suggested that the provision of 40 kcal/kg/day will permit positive caloric balance and weight gain in most patients with gastrointestinal problems. This requirement is based on ideal weight or the patient's usual weight in the pre-illness period. In the calculation of nutrients to supply the patient's caloric needs, protein calories are not included by convention. Consideration for the calorie:nitrogen ratio in the diet must be given. In the normal diet, the ratio is in the range of 200-300 kcal/gram of nitrogen consumed. For resting metabolic expenditure, the ratio of nitrogen:calories falls in the range of 1:100-200. Acute injury and infection may increase nitrogen loss compared to energy expenditure. Thus, the appropriate nitrogen:calorie ratio is in the range of 1:75-150. Conversely, in disease states such as renal failure where nitrogen accumulation occurs, the optimum nitrogen:calorie ratio is increased to 1:450-700 to suppress ureagenesis and catabolism.

In determining the protein requirement of a patient receiving total parenteral nutrition, both the amount of the protein infused and its composition are important. The recommended dietary allowance of protein for an average adult is approximately 0.9 g/kg of body weight of an "ideal" protein. The present state of the art is such that amino acid solutions containing both essential as well as sufficient nonessential amino acids to balance the mixture (approximating an ideal protein) are now utilized as a protein source. With a daily infusion of protein in the range of 1-1.5 g/kg (body weight), most patients will achieve a positive nitrogen balance. This represents a minimum of 12-15 g of nitrogen daily. Because of the availability of the readily utilizable clinical tool of nitrogen balance, adjustments to achieve a positive nitrogen balance can be made in the individual patient.

Most of the caloric requirements for a patient receiving total parental nutrition are supplied by carbohydrates. The standard intravenous carbohydrate source in the United States is monohydrate dextrose which supplies 3.4 kcal/g. Eighty to 90% of caloric requirements are generally supplied as carbohydrate. Solutions of 5-50% dextrose are available to supply these requirements. Fructose, maltose and sorbitol have also been utilized as carbohydrate sources but are not readily available for general clinical use.

Fats in the normal diet may constitute up to 40% of total calories. However, because of side effects and expense, the utilization of intravenous lipids is generally restricted to 10-20% of the caloric requirements. The utilization of the fat emulsion, Intralipid,® to supply 8-10% of the calorie requirements of a patient on total parenteral nutrition is now generally accepted. This will supply 4% of calories as essential fatty acids. Lipids are desirable for several reasons. First, they supply a concentrated source of calories, approximately 9 kcal/gm. They are not hypertonic and may be used peripherally if necessary. Because they do not promote insulin release, lipids may improve nitrogen retention in catabolic patients. If patients are able to tolerate small amounts of oral lipids, safflower or corn oil may be given in dosages of 25-50 ml/day to treat symptoms of essential fatty acid deficiency.

Requirements for vitamins in total parenteral nutrition have not been established. Several factors such

as disease states and even the amount of nutrients infused may significantly alter the requirements in individual patients. Generally, one to two ml of any of several commercially available water-soluble B-complex vitamins will fulfill the daily requirements for this important group. Vitamin $B_{12}$ may be administered I.M. in doses of 100-200 micrograms monthly or added (usually with folacin) in dosage of 100 micrograms weekly to bottles of nutrients containing no other vitamins. The usual weekly dosage of folacin is 2.5 mg. Vitamin C requirements are 300-500 mg daily. This water-soluble vitamin is available as a mixture with B-complex vitamins. Presently, the only commercially available emulsion of the fat-soluble vitamins A, D and E is M.V.I.® (Multi-Vitamin Infusion, USV Laboratories). Generally, 5 ml of M.V.I. concentrate is administered twice weekly for fat soluble vitamin maintenance. As M.V.I. also contains water-soluble B-complex vitamins and vitamin D, the requirements for those vitamins are also met on the days in which it is infused. Vitamin K preparations are compatible with TPN solutions, but are often administered I.M. Weekly doses should be adjusted to the patient's prothrombin time and are usually in the range of 10-15 mg weekly. These are essentially maintenance requirements for vitamin additives. For patients with specific deficiencies, greater amounts of specific vitamins may be required. The infusion of Intralipid raises the daily requirement for vitamin E. Approximately 30 mg of vitamin E is required per 500 ml bottle of 10% Intralipid infused.

Electrolyte requirements in total parenteral nutrition vary widely in individual patients. In general, they parallel the requirements of standard I.V. feeding. Alterations may be required for patients with cardiac or renal disease as well as for disease states which lead to significant losses of electrolytes. Additional amounts of potassium, phosphate, calcium and magnesium are introduced by total parenteral nutrition. Potassium is required for the intracellular movement of glucose and amino acids. It is required for the deposition of protoplasm and lean mass at a rate of 3 mEq for each gram of nitrogen retained. In addition, potassium is necessary to replace obligatory losses, usually 40-60 mEq/day in patients with normal renal function. Usual adult phosphate requirements are 10-12 mM phosphorus per liter (20-24 mEq of dibasic phosphorus) of TPN solution. The amount infused should be about 1.5 times the calcium infusion. The usual calcium requirement is 15-20 mEq/day. Therefore, about 30 mEq/day of phosphate will also be required due to reciprocal relationships between serum calcium and phosphate levels. Magnesium is retained at a rate of 0.5 mEq for each gram of nitrogen. The recommended daily requirement for magnesium is approximately 24 mEq for adults. Additional requirements for magnesium occur in several disease states because of significant losses. These include prolonged diarrhea, short bowel syndromes, cirrhosis, alcoholism and thermal burns. Patients with renal disease should be monitored closely to prevent hypermagnesemia.

Attention must also be given to the addition of minerals and other micronutrients which may be required only in trace amounts on a monthly basis. Particularly, in patients on prolonged total parenteral nutrition, deficiencies of trace elements may be expected. Currently, no standard recommendation or preparation including these minerals is available. Iron is required at levels of 1 to 15 mg/day. This may be administered I.M. or I.V. as iron salts or iron dextran preparations. Zinc may be required at levels of 2 to 4 mg or more per day, particularly in patients with significant trauma or small bowel fistulae. Other trace elements for which requirements have been suggested include iodine, copper, manganese, chromium and selenium. Transfusions of whole blood and fresh frozen plasma have been utilized in the past to provide micronutrients. However, the use of blood products is not without significant risk and little uniformity in replacement can be guaranteed. Most of these trace elements are available in a soluble form compatible with other TPN nutrients. These may be administered to correct specific deficiencies and it is anticipated that a commercial preparation of trace elements will soon be available to fill this nutritional gap.

Finally, in administration of nutrients, fluid requirements must be considered. The basic fluid input should be 1.2-1.5 ml/kcal. In the theoretical 70 kg man with a caloric requirement of 40 kcal/kg, amounts to 40-60 ml/kg or 3.5-4.2 l would be required daily and patients with impaired renal function should be limited to approximately one liter/day. Jeejeebhoy and colleagues have suggested that, in patients with congestive heart failure, infusions of 40 ml/kg is tolerated in most patients provided sodium input is restricted to about 20-30 mEq/day.

## Administering Total Parenteral Solutions

The technical aspects of administering total parenteral solutions involve the catheter and associated infusion equipment, preparation solutions, and monitoring of administration. As noted earlier, to reduce complications, a team approach is best. Individuals knowledgeable and skilled in applying known techniques generate optimal outcomes.

A plastic cannula introduced into the superior vena cava via a percutaneous cannulation of the subclavian

vein continues to be the preferred route of administration of adult patients. The technique is relatively safe and the area lends itself to good antiseptic technique both in the placement of the catheter and its maintenance. Dressings over the catheter are changed daily or every other day. Infusion tubing is replaced daily. The line established for total parenteral nutrition is used solely for that purpose. No blood or pressure measurements are taken from the TPN catheter. Additionally, no medications are given via this catheter. To prevent infusion of contaminants, a 0.22 micron disposable millipore filter is generally utilized in the infusion line as close to the catheter as possible. Although a gravity drip may be utilized in infusing TPN solutions, current practice is to utilize a controlled infusion pump. Monitoring features and warning alarms associated with the use of such equipment provide visual and auditory cues to both patient and personnel when complications arise. The use of this equipment does restrict the mobility of the patient somewhat. As many become more sophisticated in the management of their own nutrition, gravity drip monitored by such patients can be employed. Because of the cost of such equipment, gravity may be utilized in home TPN administration.

While TPN solutions are ordered in individual patients by a physician, the storage, inspection and preparation of such solutions are generally under the purview of a pharmacist. Indeed, the use of laminar flow hoods, aseptic technique and careful monitoring of mixtures by a knowledgeable pharmacist have done much to minimize potential complications. While individuals require a TPN solution tailored to their needs, the use of basic formulations with individual additives has increased the safety factor and lowered the costs of total parenteral nutrition. In general, TPN solutions are composed of a concentrated protein source (usually a mixture of crystalline amino acids) with or without a standard electrolyte solution added, a concentrated carbohydrate source, vitamins and trace elements. Sterile transfer and administration sets are used in preparing the final solution.

In initiating total parenteral nutrition, care must be taken to allow time for the body to respond appropriately to the increased nutrient load. During the first 24 hours of therapy, only a single liter of TPN solution is infused. This will allow time for the pancreas to respond to the hypertonic glucose load with increased insulin. Electrolyte solutions with 5-10% glucose may be given peripherally to meet fluid requirements. On the second day, two liters are infused and the patient is advanced to three liters by the third day if the blood glucose stays within acceptable limits. Glucose amino acid solutions and the currently available lipid infusion (Intralipid) are not compatible when mixed. The lipid emulsion is not compatible with additives such as vitamins and minerals. Intralipid may be infused through the central catheter when connected by a "y" connector or given peripherally.

Monitoring and careful record keeping are essential to the success of a program of total parenteral nutrition. Baseline studies have been outlined previously. After initiating infusion of the TPN solution, fractional urines should be tested four times daily for glucose and acetone. Accurate fluid balances should be recorded daily. Weights and temperatures should be recorded daily. Nutritional assessment should be made on a regular basis: nitrogen balances twice weekly, skin tests for anergy every one to two weeks until the patient is nutritionally repleted; lymphocyte counts and TIBC's weekly until the patient is nutritionally repleted; anthropometrics every three weeks. In general, serum electrolytes and blood glucose should be obtained daily until the patient is stabilized. They are then followed thrice weekly. Other laboratory tests including CBC, liver function studies, lipid profiles, minerals and renal function studies are obtained twice weekly until the patient is stabilized and, thereafter, weekly. If Intralipid is infused, the patient's ability to clear lipids should be assessed by checking the triglyceride level. It should be normal within 12 hours of infusing the emulsion. Platelet count should be checked weekly if Intralipid is being infused regularly.

## Possible Complications

Total parenteral alimentation is, by its very nature, a complicated process. To say that complications may arise represents profound understatement. These complications fall into two categories; first, those involving the mechanical aspects of the process especially the intravenous catheter and, secondly, metabolic complications which may arise particularly during prolonged administration. One of the principal advantages of an experienced knowledgeable hyperalimentation team is the reduction of complications by careful attention to detail and procedure.

The intravenous alimentation catheter is the most vulnerable component of the system. As discussed previously, meticulous care must be utilized in placing and maintaining the catheter in order to avoid complications. Pneumothorax, hemothorax, visceral trauma, emboli and misplacement are the most commonly reported complications of catheter placement. Other complications involving the catheters include phlebitis and thrombosis of the superior vena cava or subclavian veins. Patients should be placed in a Trendelenberg

position during placement and redressing of the catheter to avoid the introduction of air embolism.

The most common and serious complication involving the mechanical aspects of TPN is sepsis. Reported series would suggest a rate of septic complications ranging from 4-7% even in the best of hands. Also of pertinence is the extremely high incidence of fungal infections which comprise more than 50% of infections in most series. The usual organism is Candida although Torulopsis has also been reported. A patient receiving total parenteral nutrition should have his body temperature monitored frequently. When a significant fever elevation is noted, the hyperalimentation solutions should be discontinued and the solutions cultured. Blood should be withdrawn from the catheter and cultured, following which an isotonic dextrose solution should be infused through the catheter to prevent hypoglycemia. A standard fever workup including the taking of a careful history, physical examination and appropriate cultures should be carried out. If a source for the temperature elevation can be determined, appropriate therapy should be instituted and TPN resumed. If the source is not identified within the first 12 hours and fever persists, the I.V. catheter should be replaced and the tip of the withdrawn catheter should be cultured.

Perhaps the most frequent metabolic complications are those involving the infusion of glucose. As mentioned previously, the initiation of infusion should be in a stepwise fashion to allow the patient's insulin secretion to adjust to the increasing glucose load. Hyperglycemia and glycosuria may produce an osmotic diuresis leading to hyperosmolar, hyperglycemic, nonktotic dehydration. Exogenous insulin may be required in some patients—particularly patients with carbohydrate intolerance, sepsis or stress as well as patients receiving steroid therapy. Inadequate potassium may lead to significant glycosuria and this factor should be reviewed before insulin is administered. Hypoglycemia may occur with blockage of the catheter or other interruption of infusion. Should it be necessary to discontinue the hyperalimentation solution infusion of isotonic 5-10% dextrose solution will prevent significant hypoglycemia. Another recently recognized complication of hyperalimentation has been fatty metamorphosis of the liver in patients receiving an exceptionally high calorie:nitrogen ratio. This complication may be managed by lowering this ratio to 50:1 or less or by cyclic hyperalimentation omitting hypertonic glucose solutions for short periods of time during the day.

Relatively few other complications are associated with infusion of protein. Patients may develop prerenal azotemia if excessive amino acids are infused. This may be corrected by decreasing the total dose of amino acids or by increasing the calorie:nitrogen ratio. Occasionally, in primary hepatic disorders or with the infusion of some crystalline amino acid solutions, hyperammonemia may result. The specific amino acids which may be deficient including arginine, ornithine, aspartic acid and glutamic acid. Hyperammonemia was more commonly associated with the no-longer utilized hydrolysate solution.

After several weeks of total parenteral nutrition, patients may develop deficiency states involving minerals, vitamins or essential fatty acids. It may be very difficult to distinguish between these several deficiency states and, indeed, multiple deficiencies may coexist. A careful review of the composition of the solutions infused will usually suggest the deficient component(s). Utilization of standard solutions has helped to minimize these difficulties. The potential for electrolyte and acid base imbalances are great; however, with frequent monitoring and careful record keeping such complications can usually be avoided.

Compatibility of additives and stability of alimentation solutions may also be a significant problem. These are perhaps less well appreciated by clinicians and the participation of a cautious well-trained pharmacist is essential if these complications are to be avoided. Fortunately, the use of in-line filters will usually prevent serious complications, should precipitation of a solution occur during infusion. Indeed, perhaps the most serious complication is the inactivation of some vitamins and other additives should they be mixed in the same solution. Because of the relative paucity of published data regarding some of these complications, careful testing and monitoring by the pharmacist are necessary.

## Conclusion

Despite the potential for complications, total parenteral hyperalimentation represents one of the most significant developments of our modern health care system. Under the direction of a knowledgeable, experienced team, the nutritional status and demands of individual patients may be evaluated and total parenteral nutrition instituted where indicated. With the utilization of modern techniques and careful monitoring, the risks are slight compared to the potential benefits. In addition, careful study of patients maintained on total parenteral nutrition have generated much additional knowledge and insight into general nutritional requirements as well as specialized requirements in certain disease states. With the increased use of total parenteral nutrition have come refinements in techniques, solutions and equipment which suggest an even greater promise in the future.

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# Nutrition and Oral Health

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Of the many diseases that affect man, certain disorders of the oral cavity are the most prevalent. These diseases are, of course, dental caries and periodontal disease (gum disease). Like many diseases, these have complex etiologies and may be mediated by a variety of factors, nutrition being among the most important. What is presented here is a brief summary of current thinking of the cause of these two diseases and a somewhat more detailed description of the nutritional aspects that may play important roles in the cause and prevention of these disorders.

Dental caries (tooth decay) typically begins with the dissolution of the mineral components of the enamel portion of the tooth. If allowed to progress, this process may lead to involvement of the dentin, infection of the pulp, and ultimately to the loss of tooth viability requiring endodontic therapy or extraction. The initiating process is the formation of a complex bacterial colony, called plaque, on the surfaces of the tooth. The normal metabolic reactions of certain plaque organisms, notably *Streptococcus mutans*, result in production of organic acids, e.g. lactic acid, which in turn lowers the pH of the plaque colony. The localized increased concentration of acid at the surface of the tooth is such that a pH as low as 4.5 may be reached. At this low pH hydroxyapatite, the major tooth mineral, dissolves resulting in the formation of an incipient carious lesion. If the plaque is removed these early lesions may remineralize. However, if the plaque is not removed or if the lesion is repeatedly exposed to new plaque formation, dental caries result. During the discussion of the nutritional aspects of the process, keep in mind the following points: (1) the bacteria must be present in the oral cavity and they must adhere to the tooth surface; (2) these organisms must produce the organic acids necessary to lower the pH of the plaque colony; (3) the plaque colony is constantly bathed in saliva whose chemical composition may mediate adherence and acid formation; and (4) the chemical composition of the enamel may alter its susceptibility to dissolution by acid. Each of these factors can be modified by the nutritional status of the individual.

Both dental caries and periodontal diseases are conditions in which essentially 100% of the population are "at risk." It has been estimated that 94 million Americans have some form of periodontal disease while 32 million have advanced disease. In excess of 80% of tooth loss after the age of 35 has been attributed to this chronic, destructive disease process. Although there is still some disagreement, the concensus of opinion is that the major etiologic agent in periodontal disease appears to be a variety of anaerobic microorganisms that exist in the subgingival plaque that develops between the teeth and gums. Species of the genera *Actinomyces*, *Bacteroides*, and *Fusobacterium*, among others, have been implicated in this disease. Other local irritants such as faulty restorations and traumatic tooth contact may also contribute significantly to the problem. The ultimate loss of the tooth in severe periodontal disease results from the loss of the supporting structures around the tooth, most notably the alveolar bone. Although the end products of the metabolism of the microorganisms may contribute to direct tissue damage, i.e. loss of epithelial attachment of the tooth, the major factor contributing to the destruction of both soft and hard tissue seems to be the host's own defense mechanisms. One explanation of bone loss is that the antigenic components on the surface of the invading bacteria stimulate previously sensitized lymphocytes to release proteins called lymphokines. One such lymphokine is osteoclast activating factor (OAF) which will, if present, activate the osteoclasts to resorb the alveolar bone. This is a localized phenomenon which may occur at a very specific site. It should be remembered that periodontal disease manifests itself in a variety of inflammatory responses. Destruction of tissues certainly occurs by other mechanisms such as release of collagenase enzymes by macrophages. The example of OAF is used to point out that host defensive mechanisms

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appear to play a vital role in this disease. Again during the discussion of the nutritional aspects of periodontal disease keep the following in mind: (1) bacterial plaque must form and remain in contact with the tissues; (2) the integrity of the epithelial attachment is important in maintaining periodontal health; (3) systemic factors may play a significant part in the severity of the disease process by affecting host defense and repair mechanisms; and (4) loss of alveolar bone and other supporting structures is the basis for the irreversible damage caused by periodontal disease.

For more detailed explanations of the problems of dental caries and periodontal disease, see Gibbons and van Houte,[1] Socransky,[2] and Nisengard.[3]

With this information as a basis for discussion, some current concepts on nutrition and oral health will be presented. The discussion will be divided into three major areas: nutrition and growth and development of the oral cavity; nutritional aspects of dental caries, and nutritional aspects of periodontal disease.

## Growth and Development

The process of growth and development of the oral cavity is similar to that of any other organ. Winick and Noble have defined distinct growth phases based upon biochemical events taking place during each phase.[4] These are: (1) hyperplastic growth — a period in which the number of cells is increasing by the process of cell division; (2) hyperplastic and hypertrophic growth — a period in which both cell number and cell size is increasing; and (3) hypertrophic growth — a period in which net cell numbers remain constant while there is an increase in cell size. Stages 1 and 2 are characterized by net increases in the DNA content of the organ while stages 2 and 3 are periods in which a dramatic increase in the rate of protein synthesis is observed. It is apparent that the nutritional requirements of the organism will vary depending upon the stage of growth of the specific organ. Requirements for higher levels of folic acid (important in DNA and RNA precursor synthesis) might certainly be characteristic of phases 1 and 2 while excess essential amino acids would be required during growth phases 2 and 3.

It has been suggested that each developing structure undergoes certain "critical periods" during which nutritional stress or other stimuli may lead to irreversible changes or damage.[5] Nutritional deficiencies during stages of intense hyperplastic growth often lead to irreversible damage to the developing tissue. Nutritional stress after hyperplastic growth normally results in reversible change unless the deficiency state is very extreme or is maintained for long periods of time. In the oral cavity, the development of the teeth is especially characterized by these critical periods. Other oral structures such as alveolar bone, salivary glands, and oral epithelium also have critical periods during development and, as we will see, the normal growth of these tissues is vitally important in the maintenance of oral health in later life.

## Maternal and Infant Nutrition and Development of Teeth

The development of the teeth takes place both in utero as well as after birth up until about age 18. Since much of the development takes place before birth the nutritional status of the mother is quite important. During development, two processes occur. First is the formation of a protein matrix model of the tooth or bone and, second, the mineralization of this matrix. In teeth, these processes are accomplished by the ameloblasts. The enamel mineral is deposited in stages such that temporary deficiencies or problems during mineralization may result in localized defects in the enamel. This is best illustrated by the fluorescent staining patterns found on teeth of children who were given tetracycline therapy during tooth formation. It is important to remember that once the teeth have erupted, changes in the nutritional status of the individual have very little effect upon the composition of the enamel. Most of the information we have at this time comes from animal studies since human experimentation in this area is not feasible.

Menaker and Navia have shown that if female rats are fed low protein diets during fetal development the offspring develop a variety of oral manifestations.[6] When compared to controls, the deficient offspring have smaller molars, delayed eruption of 1st and 2nd molars, and impaired salivary gland function. The offspring also have significantly increased susceptibility to caries. The authors attribute the changes to amino acid deficiencies during the critical periods of development of these structures. When young rats are fed fatty acid deficient diets during periods of tooth development, significant alterations in tooth morphology and ameloblast structure are also noted.[7, 8]

Since tooth enamel is essentially hydroxyapatite ($Ca_{10}$ $(PO_4)_6$ $(OH)_2$) it is not surprising that severe calcium or phosphate deficiency during critical periods of development has an effect on both tooth structure and caries resistance after eruption. Early studies by Gaunt and Irving indicate that calcium and phosphate deprivation leads to much greater effects on bone than on the incisors of rats.[9] The ratio of calcium and phosphate in the diet was also shown to be of importance. The ash content of incisors of deficient rats was only slightly lower (95% of controls) and was only mildly affected by the Ca:P ratio of the diet. Bone ash was significantly reduced in deficient animals (40% of controls) but bone appeared better able to adapt to a relative calcium deficiency (low

Ca:P ratio). Further studies by Sobel et al and Stanton have suggested that variations in the Ca:P ratio in the diet of both test animals and humans may be of extreme importance in determining the caries resistance of teeth.[10-12] Sobel et al reported that animals raised on diets with high Ca:P ratios develop teeth with increased susceptibility to caries.[11] These authors suggest that the increased carbonate content of the teeth of the experimental animals leads to increased crystal defects which, in turn, render the enamel more labile to dissolution by acid. This effect is opposite to that of fluoride which is believed to increase the "crystallinity" of enamel apatite. Although the extreme Ca:P ratios used in animal studies are greater than those likely to be found in human diets, support for this idea comes from the studies of Stanton and Kreitzman who have shown that caries levels may be directly correlated to Ca:P ratios in the diet.[12, 13] Interestingly, the correlation is much greater than that obtained when caries and carbohydrate intake are compared.

Although the mineral portion of teeth is composed mainly of compounds of calcium and phosphate, a number of other inorganic components have been identified and recent research has suggested that these minor components may play a major role in governing the caries resistance of teeth. It can be shown that the composition of the minor components of enamel reflects the mineral content of the intracellular fluid at the time of calcification. Once the tooth has erupted the trace mineral composition of the tooth may change depending upon the solubility of the particular component and its concentration in the diet. Many of these components affect the caries susceptibility of enamel by altering the organization and composition of the hydroxyapatite crystals within the enamel structure. Navia suggests that the following grouping of the minor mineral components of enamel can be made: (1) Cariostatic — F, P; (2) Mildly cariostatic — Mo, V, Cu, Sr, B, Li, Au; (3) Doubtful — Be, Co, Mn, Sn, Zn, Br, I; (4) No effect — Ba, Al, Ni, Fe, Pd, Ti; and (5) Caries promoting — Se, Mg, Cd, Pt, Pb, Si.[14] In later work Curzon and Losee, studying the caries rate in human as compared with the trace element composition of extracted teeth; suggest the following: (1) F and Sr were found associated with low levels of caries; (2) Mg and Cu could be statistically correlated to high caries incidence; (3) Li, Be, Al, S, Ti, V, Cr, Fe, Co, Zn, Se, No, Mo, Zr, Sn, I, and Pb could not be correlated with either high or low caries incidence.[15] It is pointed out that these results do not preclude possible effects on caries by these elements in surface enamel, plaque, or bacterial metabolism.

Certainly, no trace element has received as much attention as has fluoride. Although a detailed discussion of fluoride is beyond the scope of this paper, a few basic facts regarding this important and often controversial element are presented for consideration. As early as the 1940's, it was evident from epidemiological data that there was a significant correlation between the fluoride content of drinking water and the incidence of dental caries in humans consuming that water. It was also known at that time that concentrations of fluoride greater than 2 or 3 ppm could be associated with randomly distributed, irregular white specks in the enamel; a condition known as mottling. In order to maximize the caries protective nature of fluoride and to minimize the mottling problem, it was suggested that fluoride be either added or removed from the drinking water to attain a final concentration of 1 ppm. In 1945 residents of Grand Rapids, Michigan began to add fluoride to their drinking water. By the 1970's over 130 million people were drinking artifically fluoridated water where the fluoride content of drinking water is low. The American Dental Association recommends fluoride supplements for children at the following level: Up to two years of age — no specific recommendation, age two to three years — 1.1 mg of NaF daily (0.5 mg F-), over three years of age — 2.2 mg NaF daily (1.Omg F-). Other groups have recommended 0.25 M.q.F- supplements daily for the first two years and Glenn recommends 2.2 m.g.NaF once daily for the pregnant woman during the last two trimesters.[16]

Fluoride appears to be most effective in reducing dental caries if two conditions are met. First, fluoride must be present in the tissue fluids of children whose teeth are in the process of mineralization. Second, after eruption, fluoride must be present in the diet to prevent the loss of fluoride from the surface enamel. When fluoride is present during mineralization, some of the mineral crystals formed are fluoroapatite ($Ca_{10}(PO_4)_6F_2$). For reasons not yet fully understood fluoroapatite is resistant to dissolution by the acids of the plaque organisms.[17] Because the surface enamel is the region first exposed to caries producing conditions, the maintenance of high concentrations of fluoride in the surface enamel is important. The continual exposure of the tooth surface to fluoride in drinking water, fluoride containing toothpastes and mouthrinses, or topically applied fluoride is necessary to maintain the high fluoride content of the surface enamel.

The fluoridation of water has been opposed on three major grounds, namely, that it is not sufficiently effective to justify the cost, that there are doubts about its safety and effects of long term exposure, and that it interferes with the liberty of the public. The suggestion that there may be damaging effects is not made without grounds since fluoride has been known for years to be a potent inhibitor of many enzymes, especially those enzymes whose action depends upon metal cations such as

magnesium.[18] As little as 10 ppm fluoride will inhibit the enzyme enolase by 45% and it has been suggested that the inhibition of bacterial metabolism is one mechanism by which fluoride may reduce caries. However, the concentration of fluoride in human tissue normally does not reach inhibitory levels of even most sensitive enzymes and studies of the overall health of individuals in communities consuming high levels of naturally occurring fluoride have shown no differences when compared to populations where fluoride is not present.[19] A small number of individuals, however, do seem to have an immediate unfavorable reaction to fluoridated water that resembles an allergic reaction or hypersensitivity.[20] The symptoms include rashes, tremors, diarrhea, stomatitis, visual disturbances, tinnitis, and mental depression. Whatever the minor risks are, the fact that fluoridation of water can reduce the caries rate by an average of 50% probably ranks water fluoridation as one of the more effective public health measures ever attempted.

Trace elements may play important roles other than protecting the tooth mineral itself. Recent studies by Iqbal et al have shown that salivary gland activity in the developing rat was inhibited when the animals were given zinc deficient diets.[21] Alkaline phosphatase, an enzyme that may play an important role in the mineralization process, was inhibited and the gland weight was reduced to 70% of controls.

Because of the difficulties in raising offspring from vitamin deficient mothers, few animal experiments involving vitamin deficiency during growth and development have been done. Most experiments have involved vitamin deprivation after birth and observation of the structure of teeth that develop after a deficient state is achieved. No changes in the growth or structure of the teeth have been observed in developing animals maintained on diets deficient in vitamin K and apparently studies have not been reported involving vitamins other than A, C, D and E. Lady Mellanby demonstrated that both animals and humans that developed with vitamin D deficiency displayed a condition known as hypoplasia (thin, irregular enamel).[22, 23] Although attempts to correlate enamel hypoplasia, rickets, and dental caries have been made no conclusive evidence has been presented. When vitamin E is given in excess to developing rats it can be shown that the teeth developing during the exposure period are more susceptible to caries than in control animals.[24] Most studies involving vitamin C deficiency have been concerned with the collagen containing structures of the adult oral cavity. The only human observation reported was made by Boyle who examined the tooth germs in two fatal cases of infantile scurvy.[25] He found little changes in developing teeth and noted that the size, arrangement, and development of the various parts appeared quite normal. This is in contrast to changes in the soft tissues that occur during clinical scurvy.

Vitamin A deficiency in developing rats caused significant alteration in the structure of the third molars.[26] These teeth were poorly mineralized, had irregular dentine, showed irregular root formation, and degeneration of some of the odontoblasts (cells found within the tooth). These changes are similar to changes reported in the incisors of deficient adults (rat incisors are continually growing). Bloch described the macroscopic structure of the teeth of 64 human patients aged between eight and 12 who were severely vitamin A deficient.[27] Although some changes were noted, many could be attributed to vitamin D deficiency and it was concluded that no gross disturbance of the enamel organ had occurred in spite of the severe vitamin A deficiency.

In terms of growth and development, I believe it can be concluded that although animal experiments have clearly shown the importance of vitamins A, D, and C and minerals in the developmental process, the teeth appear to be less sensitive to changes that significantly affect other tissues. However, the minor changes that do occur may play an important role in oral health in later life.

## Diet and Dental Caries

With the exception of the concentration of certain ions such as fluroide at the enamel surface, once teeth have erupted, the basic chemical composition does not significantly change. In the previous section, fluoride and other trace minerals were discussed and it was indicated that their continued presence in the diet may govern their actual concentration in different parts of the tooth. Aside from those considerations, the major effect of dietary components on the formation of dental caries probably involves the adherence, maintenance, and metabolism of the acid producing organisms in the plaque. The one dietary substance most often associated with caries is sucrose. Sugar intake has been clearly implicated as the major dietary factor contributing to this disease in modern man.[28] Probably the most noted report was the Vipeholm study in which the sucrose intake and caries incidence of an institutional population was compared.[29] This study concluded that the total sucrose intake and the frequency of intake along with the retentitive nature of the food were all factors associated with the caries incidence of these individuals. High caries rates could be correlated with "sticky," high sucrose containing, "between meal" snacks. Many animal studies have also supported this contention. When rats are fed diets with high levels of sucrose (30-70%) a high caries rate is observed when compared to controls.[30] However, recent studies by Huxley suggest that much lower levels of sucrose were equally as cariogenic and that raising the

sucrose level above 15% did not increase caries.[31] Studies using *Streptococcus mutans* infected gnotobiotic rats have suggested even lower sucrose levels are still cariogenic.[32] In this study, maximal caries rates were obtained with 3% sucrose and even concentrations as low as 0.1% provided sufficient substrate for the accumulation of *S. mutans* plaque in monoinfected rats. It should be pointed out that the strain of *S. mutans* used was highly a cariogenic one.

Beside the clinical and animal studies, sucrose has been singled out for two reasons. First, in the presence of sucrose but not other sugars, *S. mutans* in vitro manufactures extracellular polysaccharides that allow the organism to adhere to the tooth surface. Second, of a variety of sugars tested, sucrose is one of the most acidogenic. This is not to suggest that many other sugars do not lead to the production of acid by plaque of *S. mutans*, but the combination of adherence and acid production fits well with the clinical and animal experimental data. Based on this type of information, the dental profession has eagerly embraced the idea that refined sugar is "the enemy" and has accepted the premise that a reduction in sucrose intake would lead to a reduction in dental caries. A number of investigators have been skeptical of this simplistic approach to what certainly is a complex problem. We have already seen that the trace mineral content of teeth may play a role in caries. Other factors appear equally important. Harris has shown that the caries challenge of high sucrose diets in rats can be completely overwhelmed by additions of sodium trimetaphosphate to the diet.[33] Stanton made the interesting observation that caries could be correlated to the Ca:P ratio in the diet regardless of the sucrose intake.[12] It has been suggested that sucrose may be important in caries only in diets deficient in phosphorous or with Ca:P ratio significantly different from 0.55.[34] Curiously, few clinical studies have been done to test whether or not a reduction in sucrose intake will lead to a reduction in the rate of formation of dental caries. Dental caries appears to be a problem of a complex nature with many factors of equal importance. One should consider all these factors before recommending anything as far reaching as a significant reduction in dietary carbohydrate.

As mentioned earlier, the physical consistency of the diet may play a role in dental caries formation. A variety of studies have been done and most have shown that the longer the food is retained, the more cariogenic it is. Stookey fed rats a diet which included presweetened cereal.[35] One group received the diet premoistened while the other group ate it dry. The caries incidence was measured after 104 days and the conclusion made that because the dry diet was retained longer it was more caries promoting.

Little work has been done to relate caries to vitamin intake. Studies have been done using vitamin $B_6$ supplements and suggest a reduced caries rate in both animals and humans receiving vitamin $B_6$.[36-38]

Whether dental caries is a problem that can be controlled by simply altering sucrose intake or whether it is a highly complex problem only aggravated by dietary sucrose remains to be seen. There are other factors not considered in this paper, i.e. the composition of saliva as it related to diet. These may be of greater importance than those mentioned. Under the circumstances, I would suggest careful consideration of the facts before specific recommendations are made.

## Diet and Periodontal Disease

Probably the most controversial topic in the subject of oral health is the relationship of nutrition and periodontal disease. Although most investigators believe in a microbiological etiology for periodontal disease some researchers have suggested that it is essentially a nutritional problem with microbiologic involvement acting as a secondary factor. Rather than try to support one side or the other evidence is presented supporting both views; comment is included.

The effect of the consistency of food has been studied in relation to periodontal health. In some animal model systems, a firm, fibrous diet apparently helped prevent the accumulation of plaque and gingivitis when compared to a nutritionally equivalent soft diet.[39, 41] Although this was true for dogs, ferrets, and cats, rodents developed more periodontal lesions on a hard granular diet.[42] Attempts to relate plaque removal by fibrous diets in man have proven unsuccessful.[43] Although it has been suggested that hard diets promote keratinization of gingival tissues this has not been demonstrated in man. One possible beneficial effects is to promote salivary function which is known to play a role in both periodontal disease as well as caries.

Since the periodontium contains a number of important protein-based structures, it is not surprising that protein deficiency can lead to changes in periodontal health. Teeth are held in place by the collagenous periodontal ligament and the gingiva contains both collagen and keratin. When a variety of animals are subjected to protein or protein-calorie deficient diets, the effects on the periodontium are similar. In the presence of plaque, typical symptoms include gingival inflammation, loss of alveolar bone density, degeneration of the periodontal ligament, and increased periodontal pocket depth.[44-46] Studies of protein deficient human populations have also suggested the importance of protein in periodontal health. Indian children with severe protein deficiency showed more periodontal problems than did healthy children.[47] Cheraskin and Ringsdorf examined

the effects of protein supplementation, local therapy, and a combination of both on periodontal health and reported that although each provided benefits, a combination of the two gave best results.[48-50]

Several vitamins have been examined for the possible effects of supplementation or deficiency on periodontal health. Although studies using rats have suggested significant alterations in epithelial integrity, bone structure, and periodontal pocket depth if the animals were fed vitamin A deficient diets,[51-53] human studies show little or no correlation between vitamin A deficiency or serum levels and the subject's periodontal status.[54, 55] Deficiency of B complex vitamins has been studied and data similar to that for vitamin A have been obtained. Animal studies have demonstrated deficiency of vitamin B complex causes changes in the gingiva, periodontal fibers, and alveolar bone.[56-58] Although in one survey urinary levels of thiamine and riboflavin could not be correlated to periodontal health,[54] in another, persons with clinical signs of B complex deficiency showed increased periodontal disease scores.[59] Vogel et al have recently shown that folic acid supplementation reduces the flow of gingival exudate; an observation that suggests improvement in gingival health.[60]

Certainly no vitamins have received as much attention in recent years as have C and E. Their role in periodontal health has been a subject of controversy for a number of years with no solution in sight. In the case of vitamin C, deficient animal models have shown that even in the absence of local irritants certain clinical symptoms of periodontal disease develop.[61-63] The symptoms include tooth mobility, hemorrhage, and loss of periodontal fibers, symptoms not unexpected considering the alterations in collagen metabolism known to accompany vitamin C deficiency. Again, as in the case of vitamins A and B complex, human investigations have not been in agreement. Although attempts to correlate serum levels of vitamin C with the presence or severity of periodontal disease have generally failed, [54, 64] supplementation of excess vitamin C may be beneficial to the maintenance of periodontal health.[65-67] However, this suggestion has been disputed by other studies.[68-70] Careful clinical studies are needed to better define this complex problem.

Vitamin E supplementation of human diets has shown some beneficial effect in patients with periodontal disease. When patients were given 800 mg of vitamin E daily for 21 days, there was an apparent reduction in the production of gingival exudate possibly due to a reduction in the prostaglandin-mediated inflammatory response.[71] However, using another group of subjects, when the serum vitamin E levels of both diseased and healthy individuals were measured significant differences between groups could not be determined.[72]

Aside from a recent report that iron deficiency increases the severity of periodontosis in rats,[73] most work concerning the minerals has been centered around the controversy involving calcium deficiency, osteoporosis, and periodontal disease. The observation that one effect of calcium deficiency is to create osteoporosis and that in periodontal disease the changes in alveolar bone in some resembled osteoporosis has lead to the suggestion that alveolar osteoporosis induced by calcium deficiency is the primary event in the development of the periodontal disease. This idea has been supported in experiments by Henrickson, Krook et al, and Ericsson and Ekberg who have all shown that calcium deficiency in animals and humans leads to osteoporosis of alveolar bone and the development of certain symptoms characteristic of periodontal disease.[74-76] However, evidence that disputes this hypothesis has been reported. It has been shown that although calcium deficiency created osteoporosis in animals, no tooth loosening or gingivitis was observed in the absence of plaque.[77-79] This supports the evidence which points to local factors as the main cause of most periodontal disease.

The main body of evidence indicates that nutrition plays a modifying rather than an initiating role in periodontal diseases and that the maintenance of good nutritional status may alter both the susceptibility to, or severity of, periodontal disease.

## Conclusions

The complexity of the relationship between oral health and nutrition is apparent from the data presented. Unfortunately until more research is carried out and some of the more controversial questions answered, only general statements regarding recommendations can be made. Based on the current state of understanding it can be suggested that nutrition plays a major modifying role in the etiologies of both dental caries and periodontal disease. Although apparently neither disease can be prevented nor cured by only dietary restrictions or supplementation, to ignore the nutritional considerations of these disease processes is a serious mistake. The role of nutrition in oral health is becoming increasingly evident and nutritional counseling should become part of the responsibility of the practicing dentist, as well as the practicing physician.

References are available from the author upon request.

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# Nutrition and Childhood Diabetes

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The role of diet in the management of diabetes in children is usually presented in rather simplistic terms. The concept of balancing caloric intake against energy expenditure is presented in a manner suggesting that careful observation plus a pocket calculator will lead to success in this adventure.

This approach has been reasonably effective in the management of diabetes in adults.[1] A standard goal for this type of dietary management is maintaining "consistency in food intake from day to day." Implicit in this statement is maintenance of constant energy expenditure from day to day. Although something approaching consistency of energy expenditure may be approached in certain healthy compulsive young adults this goal is physiologically impossible for vigorously growing, physically maturing children.

The nutritional problems of childhood differ from those of adults. The nutrients must provide energy for physical activity. This varies on a daily basis that depends on school and social activities, TV programs and the weather. Energy expenditure varies with age during the first years of life as the child increases physical abilities and decreases the proportion of time spent sleeping.

Energy and nutritional requirements are also directly related to physical growth. Growth rate is not constant throughout childhood. The highest rate of increase occurs during the first two years of life with another spurt in adolescence. The age at which increased energy is required for the adolescent growth spurt is variable and occurs between 10 and 18 years of age. An indicator of sufficient caloric intake and utilization in a healthy child is the rate of growth and weight gain. However, at insufficent levels of energy intake a child may maintain normal growth rates by a reduction of physical activity as an adaptive mechanism. This dysfunction is more difficult to assess than growth failure.

Casual observations of normal nondiabetic children suggest that quantity and quality of intake vary widely from day to day. More objective quantitation of the dietary consumption of children confirms that impression.[2] Children provided the opportunity to self-select their diet demonstrated variable dailv intake. Certain foods were consumed in excessive quantities while others were refused. The long term quality and quantity of food ingested, however, were appropriate. This suggests that constant day to day caloric intake may not be optimal for normal growth. It is more likely, however, that the individual child has an effective innate indicator of the quantity and quality of required calories. This indicator by definition, is more physiologic than external calculated regulation of calories. The more compulsive meal planner would have to abandon his calculator and resort to a computer to consider all of the important variables regulating caloric need in children.

This is not to suggest that the growing child should not have his diet planned. The great attachment of children to television viewing and the coincident exposure to the highly desirable claims for high calorie low quality food demands counter education and regulation of the eating habits of children. A problem of equal importance is the present practice of continual snacking which is encouraged by and while watching television. In short, food ingestion is a major activity in many families unrelated to nutritional need. The physiologic directors of eating habits are being overridden by social and commercial influences.

Coronary heart disease is a major cause of death in both the diabetic and nondiabetic population. Two factors firmly established as leading to an increased risk of coronary heart disease are hypertension and hypercholesterolemia.[3] There is much recent interest in the influence of childhood diets upon these factors.

Communities that have a high salt intake tend to have high average blood pressure.[4] Experimental evidence in rats indicates that animals have more hypertension in adult life if subjected to high sodium intake during infancy.[5] Although there is yet no direct evidence in humans that high salt intake predisposes to later hypertension it seems logical to limit the use of salt in children at risk for hypertension. Children with diabetes are at an increased risk for both hypertension and coronary heart disease. Accordingly, these families are advised to avoid excess salt in their diet.

Hypercholesterolemia is also associated with increased risk for myocardial infarction. Hypercholesterolemia occurs in association with diabetes mellitus. A low cholesterol diet is the first step in correcting hypercholesterolemia.[6] This diet features avoidance of egg yolk, fatty meats and the use of skimmed milk (1% fat)

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and low cholesterol margarine. Early reports of using low cholesterol feedings to prevent hypercholesterolemia in infants with familial hypercholesterolemia suggest that it is beneficial.[7]

Long term benefits from such a diet have not been determined. Dietary planning to avoid hypercholesterolemia in children with diabetes, however, seems judicious at this time. Thus, dietary and nutritional counseling is appropriate for the well being of all children. It is of particular importance for children who have diabetes, a dysfunction in normal energy metabolism that prevents physiologic compensation for poor eating habits.

Since children with diabetes have the same energy requirements for normal growth and development as nondiabetic children the preceding discussion should serve as a model for action. When caloric intake must be varied from day to day the best regulator is the child's appetite center. No defect has been demonstrated in this function in children with diabetes. Meal planning and supervision must be employed, however, to allow this center to function optimally without interference from the continuous external advice to consume food products for reasons other than physiologic need.

Specific guidelines helpful for families and their children with diabetes have been offered by Schmitt in the form of an "unmeasured diet" for children and adolescents with diabetes.[8]

A modified version of this plan is used in our clinic.

## An Unmeasured Diet

### Meals

#### Main Course

1. Meals should contain a variety of foods necessary to provide the nutritional requirements for normal growth and development. Information required for this can be provided by a nutritionist who may use the Exchange Lists for Meal Planning[9] as a guide. Major goals during the educational process are the utilization of a large variety of foods and avoiding the concept of "safe" and "bad" foods. It is possible to consume too much of any food. All food items may be taken at appropriate times. Those foods with high sugar content while deficient in other nutritional value are only appropriate at times of high energy needs. Thus, they should only be used at times of unusual energy expenditure (physical exertion) or the treatment of hypoglycemia.

2. The child should be allowed to decide the amount of food he eats. He should not be forced to finish a meal if he doesn't want all of it. However, skipping meals should not be allowed. One must also understand that some children manifest hypoglycemia by refusing to eat. Thus, some degree of food consumption during at least three meals and a bedtime snack is mandatory.

3. The food should be served or selected in standard restaurant size portions. When this has been consumed, seconds of similar size of any or all of the meal constituents may be taken. If the child continues to be hungry following seconds, a time delay of approximately 15 minutes should be employed before allowing thirds, etc. Food consumption beyond this, even in growing adolescents, is a bit unusual and should serve as an indicator of hypoglycemia and possible excessive insulin dosage.

4. The meals should be planned for approximately the same time each day and be the same for the entire family. The child with diabetes should not be served different foods at mealtime than other family members.

#### Snacks

1. Snacks are light meals taken between the three major meals of the day to prevent hypoglycemia. Routinely they should contain fewer calories than the major meals and be selected from one or two food groups.

2. Mid-afternoon snacks (4:00 p.m.) are common for most children and are usually required for children with diabetes. Bedtime snacks are important for most children, but many adolescents taking a single dose of intermediate acting insulin may not desire or need a bedtime snack.

Mid-morning snacks are helpful for most preschool children but older children rarely need them.

3. Good snack foods are one or two of the following: low-fat milk, crackers, cheese, peanut butter, sandwich, fruit.

4. A snack is especially important before or directly after vigorous exercise. This may be an appropriate time for a concentrated sweet (i.e. sugar sweetened beverage, candy bar, etc.).

#### Sweets

1. Dessert foods are frequently the sweetest foods in the diet. If they are part of the family diet plan, they should be limited to one meal each day.

2. The helping size again should be conservative and no seconds are allowed.

3. Good dessert foods are: pudding, jello, fruit, ice milk.

4. Concentrated sugar, sweetened beverage, honey, candy and sugar should routinely be avoided. These are appropriate for treating hypoglycemia and during vigorous athletic events.

#### "Insulin Reactions" — Hypoglycemia

1. Children with diabetes should always have a quick source of glucose with them. Individually wrapped sugar cubes are ideal since they are less tempting for unrequired treats and less likely to become so gooey in

the wrapper that they cannot be used in time of emergency.

2. If doubt exists about the occurrence of an insulin reaction — treat. Food is harmless, untreated insulin reactions are not.

**Salt**

1. The salt shaker should not be on the dining table.

2. Salt may be used in moderation for cooking, but extra salt is not to be added at the table.

**Avoid Cholesterol**

1. Use margarine instead of butter.
2. Use skim milk (1% Fat) instead of whole milk.
3. Trim your meat before eating it.
4. Three eggs per week maximum.

**Obesity**

1. The above rules apply only to young, growing, maturing individuals. When growth is complete, then limitations on amounts of food are appropriate.

2. The Exchange System of Meal Planning with greater emphasis upon calorie restriction is then appropriate.

Nutritional management is an important aspect in the care of children with diabetes. It should not be ignored or left up to the nondiscretion of the families involved. A greater degree of hyperglycemia occurs with unmanaged diets.[10] Undesirable and potentially dangerous hypoglycemia also occurs when unplanned nutrition results in inadequate calories. However, one must keep in mind while directing such activities that the appropriate quality and quantity of nutrients for growing, physically maturing individuals is quite variable. Both individual and daily changes make specific diet prescriptions too inflexible to be appropriate for the child with diabetes. The great importance of appropriate nutrition for the child with diabetes is a compelling reason for the medical management of these individuals to be controlled by those most knowledgeable of the normal growth, development and energy requirements of children — the pediatrician.

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# Nutrition: Joint Responsibility of Agriculture and Medicine


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The need for good nutrition is given "lip service" by almost every lay or professional person but the ultimate responsibility for adequate nutrition and its role in maintaining human health can be said to rest squarely on the sister disciplines of agriculture and medicine.

The charge is often made that agriculturalists are too concerned with quantity production of food products with little concern for the effects of their products on health. Physicians, on the other hand, are often charged with ignoring the importance of nutrition, concentrating on treatment of disease conditions without concern for either the preventive or supportive roles of good nutrition practice.

As is often the case, the actual situation is quite different for food producers are concerned about nutritional quality and physicians recognize the need for good nutrition, but there is great need for improved concern on the part of both agriculture and medicine. This discussion will suggest that agriculture and medicine are sister disciplines in maintaining human health. There


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are many ways in which they can and should support each other. Since nutrition is a discipline of great common interest, it is natural to examine areas where research and practice in agriculture and in medicine are jointly supportive.

### Interaction Between Agriculture and Medicine

Production of adequate food to meet energy and nutrient requirements of humans and animals has always been a basic responsibility of agriculture. We too often forget that famine is still the lot of many humans and it has only been in comparatively recent times that, at least in more developed countries, adequate food supplies could be assured. In a country such as the United States the availability of adequate food and a wide variety of foodstuffs in all seasons of the year has made it possible for physicians to take for granted that the nutritional needs of patients will be met, whether to prevent disease or to aid in the treatment of disease conditions.

The ethical considerations of research have inevitably meant the need for animal models in investigations that can contribute to knowledge applicable to humans. In turn, agriculturalists concerned with the nutrition of animals have uncovered information that has resulted in improved nutrition for humans.

Looking back it is easy to point out that solutions to many of the deficiency diseases have resulted from research carried out by agricultural scientists whose primary interest was in solving problems of animal nutrition. It can be demonstrated that knowledge of many of the vitamins, trace elements, amino acids and lipids and their functions resulted from research in agricultural research centers. But it is also true that transfer of this information to humans became and remains the responsibility of investigators and practitioners in the field of medicine.

Illustration is always better than generality and two recent examples can demonstrate the importance of the interaction between agriculture and medicine.

Agriculturalists and physicians have realized for years that vitamin D is necessary for good metabolism of calcium and phosphorus. This vitamin, which results from ultraviolet radiation of ergosterol or 7-dehydrocholesterol, has been regularly included in the diet of humans and animals or developed internally by exposure to sunlight or a source of untraviolet light. Prior to 1968, the mechanism of vitamin D function was a matter of constant discussion among investigators. Conditions in humans and animals that did not respond to vitamin D were recognized and often given the appellation "idiopathic." Perhaps, in this way, we used a big word as a means of covering our ignorance.

But, since 1968, as a result of work at the experiment stations, especially Cornell and Wisconsin, a whole new explosion of knowledge about vitamin D, its biochemistry and its metabolism in the body has taken place. A team of workers at Wisconsin, under the direction of Dr. Hector F. DeLuca, demonstrated that vitamin D had to be modified within the body before it could function in its role in the absorption of calcium and phosphorus from the intestinal tract. Actually, it has been demonstrated that vitamin D, when it is absorbed, goes to the liver where an OH group is added in the 25 position. This product is then transported to the kidney where a second OH group is added in the 1-$\alpha$ position. It is this product, 1-$\alpha$,25$(OH)_2D_3$, that is transported to the cells of the intestinal mucosa where a compound known as calcium binding protein (CaBP) is formed. The metabolite of vitamin D functions as a hormone to stimulate this formation. The CaBP then serves as a mechanism for the transport of the calcium across the membranes of the intestinal cell walls.

It should be pointed out that Dr. Robert H. Wasserman at Cornell and his colleagues had been actively investigating the formation of CaBP and had demonstrated its role in a number of species of animals. Consequently it was very convenient and natural that the investigations of these two groups of investigators at agricultural experiment stations should be correlated and confirmed by investigators at other agricultural experiment stations.

With the discovery that vitamin D functioned as a hormone after the formation of metabolites, it was but one step further to have this compound, the metabolite, synthesized and prepared for use in special medical problems. This is particularly true in as much as people with kidney failure often suffer from an inability to form the 1-$\alpha$,25$(OH)_2D_3$ and, therefore, formation of the CaBP needed for the absorption of calcium and phosphorus from the intestinal tract. It had been known that some individuals on dialysis for long periods of time suffered from a loss of calcium in the bones and were unable to replete this calcium. With the development of the information about the role of the kidney in the formation of the vitamin D metabolite it now is within the realm of possibility to correct this deficiency and, in fact, this has been carried out with good success experimentally. A quote from a statement released from the University of Wisconsin is pertinent: "The drug [1,25$(OH_2D_3$] similar to a hormone has been tested on about ten patients in the United States and Canada and has succeeded in eliminating the crippling effects and severe pain that bone deterioration may bring in kidney patients.

"The drug will probably be useful to some extent to everyone who must use kidney machines to replace failed kidneys. It is estimated that there are about 100,000 such patients in the U. S. Only a few of them suffer from severe and sometimes fatal bone disease. Dr. DeLuca feels that

it will be at least two years before all the safety testing will be done on the drug and it becomes available to physicians. Various forms of the drug are manufactured by Hoffman-LaRoche Company and the Upjohn Company."

While interest in the application to humans is, of course, primary for the physician, the agriculturalist also has an interest since the drug is strikingly effective in the prevention of milk fever disease in dairy cattle, reducing milk fever incidence from as high as 80% in a susceptible herd to less than 10%. Of special importance is the fact that the repeated doses can be given without danger to the animals.

The end of this research is far from apparent. Investigations in Argentina and collaborative work in the United States have demonstrated that a plant, *Solanum malacoxyln*, contains a compound which Dr. Wasserman at Cornell has shown to be 1-$\alpha$,25(OH) $D^{23}$glycoside. It had been known for many years that cattle and sheep and horses grazing in a large part of South America developed excess calcification of the cardiovascular system. With the investigations carried on by agricultural investigators it was possible to demonstrate that this calcification resulted from the animals consuming some of the plant which caused a rapid elevation of calcium and phosphorus in the blood. It has now been demonstrated that at least three genera of plants contain a compound that is either the same as the vitamin D metabolite or is easliy converted to the metabilite in the digestive tract, with the result that abnormal amounts of calcium and phosphorus are absorbed. This results in metastatic calcification of the elastic tissues, especially those in the cardiovascular system. The question is raised as to whether or not there are other plants which may contain this substance or a similar substance that influences the absorption of calcium and phosphorus. It is apparent that, by avoiding the normal metabolism of vitamin D through introduction of the hormone form of vitamin D directly into the intestine, the homeostatic controls that are functioning within the normal individuals are bypassed and the absorption of calcium and phosphorus can be excessive with resulting development of disease.

There are good reasons to suspect that many plants, as yet to be investigated, may contain small amounts of the compounds that are now recognized as derivatives of vitamin D and, consequently, can influence the metabolism of calcium and phosphorus in animals and in humans. As long ago as 1947-1948, investigators at the Florida Agricultural Experiment Station were able to show that Florida milk naturally contains more vitamin D than milk from areas in Wisconsin and Minnesota. Since homeostatic controls would rule out the possibility that the additional sunshine to which dairy cattle are exposed in Florida might be the factor which caused this higher vitamin D in the milk, it was necessary to examine the forage that the cattle were consuming. It was shown that this forage did have unexpected vitamin D activity. Consequently, it was assumed that animals consuming this forage, therefore consuming excess vitamin D, were excreting some of this vitamin D in the milk. Now 30 years later, it would appear that much more fundamental differences may exist between the types of forage growing in subtropical areas such as Florida and those commonly produced in more northern latitudes.

The study of the nutrient requirements for trace elements has been a particularly effective one for interaction between agriculture and medicine. The role of iodine in thyroid function, the need for iron and the interaction of iron and copper in hemoglobin formation, the role of cobalt as a part of vitamin $B_{12}$ and its relationship to pernicious anemia are just a few examples of human health benefits from the research and interaction between agriculture and medicine.

When Dr. W. D. Salmon and his colleagues at Auburn, Alabama reported in 1955 that zinc was a key to prevention and cure of parakeratosis in swine, it came as a shock to investigators in animal nutrition who had been convinced that a zinc deficiency was a remote possibility in animal feeding. Once it was demonstrated that zinc played such an important role, numerous investigators found that zinc deficiency was a frequent problem in other classes of livestock as well as swine. It was not long before zinc and its role in human nutrition was attracting the interest of physicians and research investigators concerned with human health. In 1961 zinc deficiency was suspected in humans and by 1963 it had been demonstrated.

The close resemblance between zinc deficiency in animals and in humans suggested that many of the same biochemical reactions occur in both animals and humans and this encouraged application of information developed with animal models to human problems.

When a conference on zinc metabolism was held at Wayne State University (proceedings published in 1966), zinc was being examined as a factor in human endocrine abnormalities, in bone metabolism and in myocardial metabolism, with strong indications that zinc influenced biochemical reactions in all of these areas.

The reports and discussions taking place at the Western Hemisphere Nutrition Congress V in 1977 emphasized that zinc is a factor in taste acuity and, therefore, appetite, in normal development of children, in wound healing, in skin dermatoses and, perhaps, in many other metabolic functions. Truly the agriculture research into a problem affecting livestock has provided another step forward in our knowledge of the role of proper nutrition in the prevention of disease and maintenance of health.

### Joint Responsibility

Perhaps these two examples emphasize the joint responsibility that rests on agricultural scientists and the medical profession. They may also emphasize the need for better communication and collaboration between the disciplines of agriculture and medicine and between the scientists and the general public.

The close working relationship existing between agriculture and the health professions at the University of Florida, located on the same campus, provides an unusually valuable situation where interchange of ideas and research results and collaborative research stimulates and accelerates the development of answers to problems of both areas. In the areas of nutrition, physiology, neurology, biochemistry and gastroenterology to name a few, major advances are being made through collaboration between the disciplines in agriculture and the health sciences.

Investigators and practitioners in agriculture and medicine have one great principle in common which is that we still have many unknowns influencing production and human health. Fortunately, the basic investigations carried on by interdisciplinary teams can go a long way toward obtaining solutions to each others' problems.

It is good for all of us to examine the relationship between agriculture and medicine for not only is agriculture concerned with the production of adequate amounts of nutritious food but there is a tremendous research effort being expended to solve the basic problems that may eventually enable the practicing physician to better perform his task of keeping people healthy. The research also enables the practicing agriculturalist to provide the products that meet human and animal nutritional needs. Hopefully, good nutrition can be provided to all of our people and not only prevent many health problems from developing but assist in the treatment of diseases that arise from other causes.

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# Meeting Recommended Dietary Allowances


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Recommended Dietary Allowances (RDA) are the best known and most widely used nutrition standards in the United States. They are established by the Food and Nutrition Board (FNB) of the National Academy of Sciences/National Research Council (NAS/NRC) as guidelines for assessing the adequacy of intakes of essential nutrients. Such standards are needed for evaluating the nutritional adequacy of diets both for maintenance of health and for treatment of disease. They are needed as guides for recommendations for modification of the diets of persons who may be at risk of nutritional inadequacy owing to inappropraite food selection. They serve as the basis for recommendations for modification of the national food supply when some type of nutritional inadequacy is identified as a public health problem.


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### What Are Recommended Dietary Allowances?

Recommended dietary allowances are defined as amounts of essential nutrients that will meet the known physiological needs of essentially all healthy persons. They are amounts that, if consumed daily by each person in a population, should meet the needs of all, or at least almost all. They are recommendations for population groups, and are, therefore, set high enough to cover the needs of those with the highest requirements.

The RDA are not "recommended" intakes in the sense that they are guidelines for the most appropriate intake of each essential nutrient. They are not "ideal" intakes of nutrients. The most appropriate intake of a nutrient depends on many factors; it can vary with the individual and can differ from time to time. The concept of an "ideal" nutrient intake or diet is a theoretical concept; it can be defined only by those who profess to have absolute knowledge. The RDA are recommendations for desirable lower limits of intake for population groups. They represent adequate or satisfactory intakes of essential nutrients for healthy people. They are not recommendations for therapeutic management of those who are ill.

The RDA are based on the available scientific knowledge of human requirements for nutrients, on information about the way requirements change with age and physiological state, upon knowledge of factors that influence the utilization of nutrients after they have been consumed, and upon information about variability among individuals in their requirements for nutrients. Since the RDA are designed to meet the needs of those with the highest requirements, they cannot be equated with average requirements. They exceed the needs of most people. The RDA do not take into account losses of nutrients that may occur during food preparation. They are not amounts of nutrients that should be present in the food supply but, rather, are the amounts that should be consumed.

## RDA for Energy

It is important in disucssing RDA to recognize at the outset that allowances for energy, i.e. for calories, are based on a different concept than that used for establishing allowances for the various essential nutrients. The RDA for energy are estimates of the requirements of persons with average energy expenditure in each age-sex group for which recommendations are made. If energy allowances were designed to cover needs of those with the highest requirements, they would be recommendations for obesity for most people. Energy requirements of individuals vary widely, depending upon body size, age and physical activity. However, since the amount of food a person consumes is ordinarily controlled well by the body to balance energy expenditure, there is little need to be concerned about meeting these needs in a population with an adequate supply of palatable food. Of much greater concern is the tendency for a substantial number of people to consume more calories than they need. The energy allowances are based on the average requirement for resting metabolism plus an additional allowance for the average amount of physical activity for each age group. They are, thus, reasonable guides for the energy needs of large groups of people, since about half will have energy requirements above the average and about half below.

There are conditions in which meeting energy needs deserves special consideration. The energy needs of the elderly are low because both basal metabolic rate and physical activity decline with age. Energy expenditure is also low whenever physical activity is restricted as the result of chronic illness or physical disability. When energy needs are low, probably on the order of 1500 kcal/day, it becomes increasingly difficult to meet the needs for essential nutrients from the amounts of foods needed to meet caloric needs. It is important for those with low energy requirements to select foods that are rich in essential nutrients and to limit the amounts of those that provide mainly calories, such as highly refined starches, sugars, oils, fats and alcohol. This is also important for those who are restricting food intake in an effort to lose weight.

## RDA and Food Labels

Before discussing the RDA for essential nutrients, it is necessary to distinguish clearly between the NAS/NRC RDA, which are used as nutritional standards, and the U.S. RDA which have been established by the Food and Drug Administration (FDA) for regulatory purposes and for nutritional labeling. The NAS/NRC RDA, with which we are concerned here, are established for a wide range of age groups from infancy through adulthood. They take into account differences in body weight, sex and physiological state. They can be used as guides for the amounts of nutrients needed by groups who differ greatly in age or size. The U.S. RDA of the FDA, on the other hand, are a single set of values based usually on the highest NAS/NRC RDA, that for adult man. These serve as guides for comparing the nutrient content of different food products. They are not adjusted for differences in age and physiologic state so cannot be used as guides to nutritional needs, except for physically mature men. They greatly exceed the needs for the younger and smaller members of a family or population.

## Procedure for Establishing RDA

The starting point for establishing RDA is the available information about human requirements for essential nutrients. There have been relatively few studies in which human subjects have been fed diets that contain inadequate quantities of specific nutrients for long enough periods of time to establish the amount that will just prevent the development of deficiency signs. There have, however, been a larger number of studies in which the amount of a nutrient that is required to prevent a fall in the concentration of the nutrient in blood or losses from the body has been determined.

The balance procedure has been used extensively for estimating the requirements of adults for protein and for minerals. All of the nitrogen from dietary protein is excreted, primarily in urine and feces. This is also true of mineral elements that are essential nutrients. Measurements of the minimum amount of such nutrients that must be consumed to just balance the amounts lost from the body while body weight remains constant provide estimates of the minimum requirements of these nutrients for maintenance. Some additional amount over the urine and fecal losses must be added to this to compensate for the amounts lost in sweat, sloughed skin, hair and other body excretions and secretions. This procedure has been used to estimate the average protein requirement of adults of about half a gram of high quality protein/kg body weight/day.

Most of the vitamins are degraded to end products that are not readily measurable, therefore, techniques other than the balance procedure must be used to estimate requirements for this group of nutrients. For several of the vitamins, human volunteers have consumed diets containing inadequate amounts of the vitamin until signs of a specific deficiency disease began to develop. The amount of vitamin A and of several of the B-vitamins required to prevent such specific diseases has been determined in this way. For some of the B-vitamins, a readily identifiable metabolic end product or the vitamin itself is excreted in the urine. The concentration of the vitamin or its metabolites in the urine usually remains low until the requirement has been met. When the requirement is exceeded, urinary excretion then rises sharply. This method has been used to establish requirements for thiamin, riboflavin and niacin.

For some nutrients, it is possible to estimate the requirement from measurement in human subjects of changes in the blood concentration or in a metabolic function for which the nutrient is required. Vitamin E, for example, is required to maintain the integrity of the membrane of the erythrocyte. In fact, vitamin E status can be assessed by examining the resistance of erythrocytes to hemolysis in standard laboratory tests. In a study in which men consumed a diet almost devoid of vitamin E for many months, a clear-cut deficiency disease did not develop but eventually the red blood cells showed increased susceptibility to hemolysis and the blood concentration of the vitamin fell. It was difficult to establish the requirement for the vitamin accurately in this study. However, from the information obtained and from knowledge that the requirement cannot exceed the lowest amount of the vitamin found in diets that will prevent such changes an average requirement for vitamin E could be estimated. It would appear not to exceed 7-9 mg/day for adults.

For vitamin C, it has been possible, through studies in which a small amount of isotopically-labelled vitamin C has been consumed by human volunteers, to determine with a high degree of confidence the rate at which the vitamin is lost from the body. In such experiments, it has also been possible to determine how much of the vitamin is retained in the body in relation to the amount consumed. In studies of this type, it was established that only 10 mg of vitamin C was required to prevent signs of scurvy from developing. It was also established that with an intake of just over 30 mg of vitamin C per day, adult men would retain the vitamin until their bodies contained about a gram of ascorbic acid. This was enough to ensure maintenance of health for at least 40 days even if they consumed diets that provided no ascorbic acid. Where the requirement lies in this case between 10 mg and 30 mg/day is a matter of judgment as to how large the body pool of ascorbic acid should be to ensure maintenance of health.

## Additional Factors That Must Be Considered In Establishing Requirements

Infants and children who are growing rapidly require more food and more nutrients per unit of body weight than adults. As experiments of the type that have been done on adults might impair development of the child, estimates of requirements for growth must be made using indirect methods. Guidelines for requirements for infants can be obtained from measurements of the amount of milk or formula consumed by infants who are growing satisfactorily and from knowledge of the composition of the milk or formula. The amounts of specific nutrients they are consuming can then be calculated. Although this procedure does not provide values for minimum nutrient requirements, it does set an upper limit for requirements.

For intermediate age groups, for the most part, there have been so few experiments that it is necessary to calculate, from knowledge of growth rates and body composition, how much of a nutrient accumulates in the body during growth and to estimate from such calculations the requirements at different ages. This type of approach is also used to estimate the additional requirements for reproduction and lactation. The amounts of nutrients accumulating in the fetus and in the mother's tissues can be estimated from knowledge of weight gain and body composition. The amounts of nutrient secreted in milk can also be calculated to estimate the additional requirements during lactation. When this procedure is used, the value obtained is adjusted for inefficient utilization of the ingested nutrients on the basis of measurements made on adults.

Nutrient requirements for men and women are essentially the same if they are expressed per unit of body

weight. The one exception is the requirement for iron which is higher for women of child-bearing age because of the extra amount of iron they lose during menstruation.

Several factors influence requirements. For some nutrients, mainly the mineral elements, the efficiency with which they are absorbed from the intestine must be considered. Average values for iron absorption are estimated to be only about 10%, therefore, even though body losses of iron by men are only about 1 mg/day, their requirement for iron is about 10 mg/day.

There are precursors of some nutrients in foods. Tryptophan, for example, is a precursor of niacin in the body. The amount of niacin needed thus depends on the amount of tryptophan consumed as about 1 mg of niacin is formed for each 60 mg of tryptophan ingested. The contribution of precursors must also be considered in estimating vitamin A requirements since several carotenoids, the orange pigments in many vegetables and fruits, are precursors of vitamin A. For vitamin E, for which there are several naturally occurring forms that differ in their biological activity, the requirement will depend upon the relative proportions of each in the diet.

Finally, the efficiency of utilization of proteins depends upon their amino acid composition. The requirement for protein thus depends upon how efficiently the dietary protein is utilized by the body. In the United States, the quantity of protein consumed is high and the mixture of proteins in the diet is usually of good quality so low efficiency of utilization is not a serious concern. However, if much of the dietary protein is derived from cereal grains, the quantity of protein required to meet the requirement is much greater than it is with diets that contain a large proportion of animal protein.

### Converting Requirements to Allowances

The requirements of about half the people in a population would be expected to exceed the average. As those who have low requirements cannot be distinguished from those who have high requirements without elaborate metabolic studies, a statistical approach is used in order to convert average requirements to RDA, intakes of nutrients that should cover the needs of those with the highest requirements. To do this, it is necessary to know how much requirements vary from individual to individual.

Although there is not enough information to permit calculations of individual variability to be done for all nutrient requirements, enough values have been obtained for several of the requirements to permit calculation of the standard deviation of the average. Since nutrient requirements that have been studied most extensively appear to follow a statistically normal distribution, the average plus twice the standard deviation should include the requirements of all but the 2.5% of the population who have the highest requirements. As estimates of average requirements and adjustments for factors that influence requirements, such as efficiency of utilization of the nutrient, efficiency of absorption and the presence in the diet of precursors of the nutrient, tend to be on the generous side, it is unlikely that many people have requirements higher than two standard deviations above the average. In establishing the RDA, then, the average requirement is increased by an amount equivalent to twice the standard deviation. For nutrients for which enough information about individual requirements is not available, it is assumed that the degree of variability does not differ greatly from nutrient to nutrient. The standard deviation expressed as a percent of the average is the coefficient of variability. This does not usually exceed 15% for requirements for which an adequate number of individual values are available. Therefore, for nutrients for which insufficient information is available, the average requirement is increased by 30% or twice the coefficient of variation in estimating the RDA.

The table gives figures for the RDA for young children and for adults. After the various adjustments have been made, the average requirement of 0.5 gm of protein/kg of body weight/day for adults has been increased to 0.8 gm/kg of body weight/day for the RDA. The average requirement for vitamin C falls between 10 and 30 mg/day for adults but the RDA has been set at 45 mg/day in order to assure that there will be enough of this vitamin in the body to provide a store that will last about 60 days even if no ascorbic acid is consumed. For vitamin E, although the average requirement was estimated to be less than 10 IU/day, the RDA is set at 15 IU in order to provide an adequate margin of safety. The relationships between the average requirements and the RDA for other nutrients are similar to these.

### Appropriate Uses of the RDA

The two major uses of the RDA are as nutrition standards for: (1) planning food supplies for population groups such as the inmates of institutions or patients in hospitals, and (2) assessing the nutritional adequacy of diets from knowledge of food composition and food intake.

The original use of the RDA was as guides for the planning and procurement of food supplies by the armed services. They are now used by a variety of public and private organizations concerned with the feeding of large groups of people. When the RDA are used as guidelines for planning diets, it is important to recognize that diets are composed of foods, not nutrients. A diet will not be consumed in an amount sufficient to provide the required amounts of essential nutrients unless it is composed of a

**Recommended Dietary Allowances**

| | Children (1-3 years) | Adults (23-50 years) | |
|---|---|---|---|
| | (13 kg) | Male (70 kg) | Female (56 kg) |
| Energy (kcalories) | 1300 | 2700 | 2000 |
| Protein (gm) | 23 | 56 | 46 |
| Vitamin A (IU) | 2000 | 5000 | 4000 |
| Vitamin D (IU) | 400 | —* | —* |
| Vitamin E (IU) | 7 | 15 | 12 |
| Vitamin C (mg) | 40 | 45 | 45 |
| Thiamin (mg) | 0.7 | 1.4 | 1.0 |
| Riboflavin (mg) | 0.8 | 1.6 | 1.2 |
| Niacin† (mg) | 9 | 18 | 13 |
| Vitamin $B^6$ (mg) | 0.6 | 2 | 2 |
| Folacin (ug) | 100 | 400 | 400 |
| Vitamin $B^{12}$ (ug) | 1.0 | 3 | 3 |
| Calcium (mg) | 800 | 800 | 800 |
| Phosphorus (mg) | 800 | 800 | 800 |
| Iodine (ug) | 60 | 130 | 100 |
| Iron (mg) | 15 | 10 | 18 |
| Magnesium (mg) | 150 | 350 | 300 |
| Zinc (mg) | 10 | 15 | 15 |

*Assuming vitamin D needs are met through exposure to sunlight.
†On the average 1 mg of niacin is formed in the body for each 60 mg of tryptophan consumed.

selection of palatable and acceptable foods that provide psychological and social satisfaction. Only after an acceptable diet has been planned should the RDA be used as a yardstick to assess the nutritional value of the diet and to serve as a guide for making adjustments to ensure that it is of high nutritional quality.

Also, it should be emphasized that, although the dietary standards are termed "recommended" allowances, this term should be equated with "acceptable intakes of nutrients" rather than with the idea of recommended intakes. The RDA are guidelines to the lower limit of adequacy. They should not be used to justify restricting intakes of nutrients to this limit. The objective in diet planning should not be to provide amounts of nutrients that just meet the RDA. Nutrients are not distributed evenly among foods and in order to ensure nutritional adequacy, the diet should be composed of as wide a variety of foods as is possible. When this is done, and the diet has been selected to ensure palatability, some nutrients are bound to be in excess of the RDA. It is well nigh impossible to devise a palatable diet that meets the needs of several of the essential nutrients without exceeding the RDA for protein.

The other major use of the RDA is as a standard for evaluating food consumption records in an effort to assess the probability of nutritional inadequacy occurring in a population. This is an appropriate use of the RDA but great caution must be exercised in drawing conclusions about nutritional status from comparisons of nutrient intakes with the RDA.

One conclusion that can be drawn with confidence from such comparisons is that the probability of nutritional inadequacy is negligible in persons who consume amounts of nutrients equal to or in excess of the RDA. Since the RDA exceed the requirements of most people, consumption of a diet that provides less than the RDA for an essential nutrient cannot be taken as evidence that the diet is nutritionally inadequate. All that can be concluded is that the farther the intake falls below the RDA, the greater is the probability of nutritional inadequacy. Reliable information about the nutritional status of persons whose nutrient intakes are less than the RDA can be obtained only through clinical and biochemical evaluations.

The most serious misuse of the RDA as dietary standards is to assume that the nutritional status of an individual can be evaluated from food intake records alone. They can, nevertheless, help to identify potential dietary problems and to identify problems that have been detected during clinical and biochemical evaluations. This points up a major limitation of dietary standards, such as the RDA; they do not provide guidelines for establishing the point at which a diet becomes inadequate. However, this should not be considered an inadequacy of the RDA. It is not possible to do this with any type of dietary standard. It could be done only if the nutritional requirements of all people were the same.

In evaluating nutrient intakes of populations, similar problems are encountered. If the average intake of a population exceeds the RDA, this does not provide

assurance that all members of the population have adequate nutrient intakes. This is the situation in the United States, for example, where the national food supply provides quantities of nutrients other than iron well in excess of the RDA. Despite this, some people have inadequate diets as the result of illness, alcoholism, neglect, ignorance, poverty, or social disintegration within the family. Since only a small percentage of people are found to show evidence of even marginal nutritional inadequacy, mainly as the result of low iron intake, it is evident that nutritional inadequacy is not the result of an inadequate food supply.

The only appropriate conclusions that can be drawn from comparisons of nutrient intakes of populations with the RDA are: (1) the farther the average intake is above the RDA, the less likelihood there is of nutritional inadequacy within the population; and (2) the farther the average intake falls below the RDA, the greater is the likelihood of nutritional inadequacy within the population.

Most of the other uses of the RDA are outgrowths of one or the other of these two primary uses. All of the precautions that must be kept in mind when the RDA are used for planning food supplies or evaluating diets must also be considered when the RDA are used as standards for nutritional labelling, as guides for establishing standards for public assistance or as the basis for regulatory standards for the nutritional quality of foods. The RDA have limitations as nutritional standards. They do not provide guidelines for establishing accurately the point at which diets become inadequate. They do not enable us to make definitive statements about nutritional status of individuals who consume less than the RDA. Nevertheless, they do provide guidelines for ensuring that diets are nutritionally adequate and they do make it possible to identify potential nutritional problems through comparisons between food supplies and the standards. The limitations of the RDA should not be exaggerated. They are the limitations of any nutritional standard.

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# Drug-Diet Interactions


**Myron Brin, Ph.D., and Daphne Roe, M.D.**


We live in a chemical world. From the beginning of time this chemical environment was either the source or result of life itself. Therefore our environment contained ozone, carbon monoxide, nitrosamines, etc., long before the industrial era.

Since living matter is composed of carbon, hydrogen, oxygen and mineral elements in organic as well as inorganic forms, these also define the nature of the nutrients. Foods must be digested into their basic components in order for an organism to utilize them metabolically for the building of tissue, repair and to reproduce its kind.

But man does not eat chemical elements, he eats food. However, not only are there nutrients in that food, but also other components which comprise exposure to a non-nutritive chemical environment. Among these are safrole, pesticides, herbicides, indoles, organic peroxides, flavones, etc. Although non-nutritive, these materials affect drug metabolism, but since they are food they might also be considered nutritional influences on drug metabolism. How confusing!

More recently, as the industrial era developed there accumulated in the environment certain residues of chemical development such as DDT and other halogenated hydrocarbon insecticides, urea herbicides, polychlorinated biphenols, heavy metals, etc., to which we are exposed inadvertently both in our physical as well as our food environment. Accordingly, it may be somewhat difficult to differentiate between the nutritive from the non-nutritive influences which are carried by foods on drug metabolism.


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What we propose to do in this paper is to describe the effects of various nutrients in our diet on drug metabolism, and then to describe the effects of drug use on nutrient needs. The material presented here should be considered a compressed overview of the available information in view of the fact that the study of drug metabolism is in itself a young discipline and, therefore, is an active field of investigation.

## Nutritional Status in the United States

While it is generally believed that the United States populations are adequately, if not overly nourished, this may not in fact be universal. Contrary to most assumptions, the largest incidence of obesity is in the lower socioeconomic group.[1] Little protein or calorie deficiency has been revealed. On the other hand, the U.S. Department of Agriculture Market Basket Survey revealed extensive inadequacies in certain portions of our populations for iron, calcium, and vitamins A, C, $B_1$, $B_2$, $B_6$ and folate.[2] In fact iron deficiency anemia was shown to be the most prevalent inadequacy in the largest portion of the population and large groups were often inadequate in more than one nutrient. It was shown too that a large portion of our population consumes approximately ½ of the United States Recommended Daily Allowance (USRDA) of 2 milligrams per day for vitamin $B_6$. (It should be noted that an average consumption of ½ an RDA means that 50% of the population consumes less than that). These findings were confirmed and extended by HEW's Ten State Nutrition Survey and further confirmation has been obtained from the HANES (Health and Nutrition Examination Survey) in which approximately 50% of the population was less than adequate in two nutrients.[3]

As will be noted later, the composition of the diet and nutritional status both influence the rate of metabolism of drugs.

A complete and properly varied diet will deliver to us a full quota of macronutrients (carbohydrates, protein and fat) and micronutrients (vitamins and minerals). Dietary guidelines have been established by the appropriate use of the four food groups and it is assumed that by the use of these guidelines an adequate diet will result. As it happens the Type A school lunch program uses the food groups to describe a specific distribution of food to be included in every federally paid lunch and must be delivered by all participating school boards. However, the United States Department of Agriculture analyzed the school lunches served to 301 schools for vitamins and minerals only to find that the diet was grossly inadequate in both.[4] Another study was done in 21 schools in North Carolina and a summary of data is shown in Table I.[5] Whole trays of food were collected as served and submitted for vitamin and mineral analysis. It was clearly evident that over 50% of lunches did not meet even 1/3 of an RDA for iron, calcium, vitamins $B_1$ and C (and probably vitamins $B_6$ and folic acid which were not assayed for). Accordingly, the following of guidelines does not necessarily assure getting adequate nutrition. Nor does simply telling a patient to eat a balanced diet (without careful instruction). Yet nutritional status influences drug metabolism.

**Table 1.—Nutrient Adequacy of Type A School Lunch.**

| Nutrient | Percent of meals less than 1/3 RDA |
|---|---|
| Calories | 100 |
| Protein | 0* |
| Vitamin C | 56 |
| Vitamin $B_1$ | 77 |
| Vitamin $B_2$ | 0* |
| Vitamin A | 28 |
| Iron | 87 |
| Calcium | 72* |

*These numbers would be higher if milk were not consumed.

## The Marginal Deficiency State

In Table 2 we present five stages in the development of vitamin deficiency.[6] In the first stage there is inadequate availability of vitamin due to diet, malabsorption or abnormal metabolism. This is the preliminary stage in which there is a depletion of body stores of nutrient. The second stage is called the biochemical one because depletion has progressed sufficiently to interfere with coenzyme formation, thereby resulting in depressed enzyme activity. Urinary excretion of vitamins is reduced to negligible levels. In the physiological or third stage there begin to appear some clinical signs of illness, or malaise. Although these signs are not specific for vitamin deficiency per se, there is loss of weight concurrent with loss of appetite, general malaise, insomnia, increased

**Table 2.—Development of Vitamin Deficiency**

| Sequence | Deficiency State | Demonstrable Symptoms and Comments |
|---|---|---|
| 1 | Preliminary | Inadequate availability of vitamin due to diet, malabsorption, and abnormal metabolism |
| 2 | Biochemical | Enzyme-coenzyme activity depressed. Urinary vitamin reduced to negligible levels |
| 3 | Physiological | Loss of body weight concurrent with appetite loss, general malaise, insomnia, and increased irritability |
| 4 | Clinical | Increased malaise, loss of body weight with the appearance of deficiency syndromes |
| 5 | Anatomical | Establishment of specific deficiency disease with specific tissue pathology. Unless reversed by repletion, death results |

irritability, somnolence, other behavioral changes, and modified drug metabolism. As the deficiency becomes more severe there appear specific clinical syndromes of vitamin deficiency such as beriberi, pellagra, rickets, etc. The fifth state which is referred to as the anatomical one is a situation of extremely severe depletion in which there is specific tissue pathology, and in which unless the situation is reversed by the administration of the missing nutrients, death results.

We refer to the first three stages as the stage or marginal (or pre-clinical) deficiency because one can reveal specific biochemical and metabolic modifications which result from vitamin depletion but without any specific clinical signs of deficiency. The clinical findings in stage three are behavioral effects (except for drug metabolism) which would not be themselves direct one toward a diagnosis of nutritional deficiency because they are so nonspecific. Nutritional researchers, however, recognize that these findings have been routinely observed where specific deficiencies have been studied under controlled laboratory conditions and often during drug therapy.

It should be borne in mind therefore that a patient who appears clinically normal may not be adequate in all nutrients. As will now be described, this state of marginal deficiency can influence the metabolism of and therefore the action of administered drugs.

## Some Interrelationships Between Drugs and Vitamins

### Effects of Marginal Vitamin Deficiency on Drug Metabolism

A summary of the effects of vitamin inadequacy on drug metabolism is shown in Table 3. These studies were largely done in experimental animals although there is a very high correlation to such findings in man.[7] It is noted that vitamin E deficiency shows markedly reduced hydroxylation and demethylation of drug substrates.[8, 10] This is noted also with deficiencies of vitamin A and vitamin C.[11, 15] In the case of riboflavin there is decreased metabolism of benzopyrene (a potent carcinogen found in tobacco smoke, etc.) but increased oxidative metabolism of aminopyrene hexobarbital and aniline.[16, 17] It is noted that thiamine deficiency, unlike the others, results in increased metabolism of heptachlor and aniline while large doses of thiamine decrease the rate of metabolism of zoxazolamine.[18, 19] As a matter of fact, excessive amounts of vitamin C also has a reverse effect.[15]

**Table 3.—Effects of Vitamin Status Upon Drug Metabolism**

| Vitamin | Status | Cytochrome P-450 | Microsomal Metabolism |
|---|---|---|---|
| E | D | 0 | – |
| A | D | – | – |
| $B_1$ | D | | + |
| | E | | – |
| $B_2$ | D | | – |
| C | D | 0 | – |
| | E | + | + |

Key to abbreviations: D Deficiency; E Level of administration in excess of ANRC recommendations; 0 No effect; + Increased; – Decreased. All data obtained from experimental animals.

It was noted that for vitamins A, E and C reduced drug metabolism resulted from marginal deficiencies before there were any clinical signs of vitamin deficiency. And a recent report has demonstrated that a vitamin deficiency results in an enhanced intestinal transport of passively absorbed drugs.[20] These two effects of vitamin inadequacy on increased absorption and on the reduction in the rate of drug degradation may individually or both result in an increased residence time of the drug in the body and, therefore, may possibly potentiate the action of the drug. This possible potentiation of drug action may not have been accorded adequate attention to this point.

### Effects of Drug Use on Vitamin Needs

Some of these findings are summarized in Table 4. It is noted that needs for both fat and water-soluble vitamins are increased as a consequence of drug therapy. Anticonvulsants such as diphenylhydantoin and phenobarbital can cause vitamin D and folic acid deficiencies.[21] In other situations such as with oral contraceptive sterioids or aspirin, only marginal deficiency states may result as reflected by reduced blood or urine levels of large numbers of vitamins and/or reduced enzyme activity. In the case of oral contraceptive steriod administration, the activity of certain enzymes may be specifically induced so that the vitamin $B_6$ requirement is increased to levels in excess of what may possible be obtainable from diet.[22, 23] It is more generally recognized that in the case of certain antituberculosis drugs such as isoniazid and penicillamine, the therapeutic agents combine directly with the vitamin $B_6$ and/or compete for vitamin $B_6$ at the enzyme binding sites, thereby again markedly increasing the requirement to levels far beyond what could be obtained from diet. For general interest the effects of certain environmental pollutants such as nitrosamines are also included in the Table. In this case the adverse effects can sometimes be reversed by vitamin C and by vitamin E.[24, 25]

While clinical signs of deficiency as described can result from drug administration, in most cases drug administration results in a pre-clinical or marginal deficiency state. This state has been defined by biochemical criteria for the measurement of vitamin adequacy.[26, 27] While in most cases simply consuming an additional USRDA of the nutrient per day will correct the

**Table 4.—Increased Vitamin Needs as a Consequence of Drug and/or Environmental Chemical Exposure.**

| Nutrient | Exposures resulting in increased vitamin needs or reduced blood levels |
|---|---|
| Vitamin A | Polychlorobiphenyls, benzopyrene, spironolactone, DDT. |
| Folacin | Oral contraceptives, anticonvulsants, methotrexate, pyrimethamine, alcohol |
| Vitamin $B_{12}$ | Biguanides, anticonvulsants, oral contraceptive steroids |
| Vitamin $B_6$ | Isonicotinic hydrazide, thiosemicarbazide, penicellamine, L-dopa, hydralazine, oral contraceptive steroids, alcohol |
| Niacin | Polychlorobiphenyls, isonicotinic hydrazide, phenylbutazone |
| Riboflavin | Boric acid |
| Vitamin D | Anticonvulsants |
| Vitamin K | Anticonvulsants, antibiotics |
| Vitamin C | Smoking, aspirin, oral contraceptive sterioids, nitrosamines |
| Vitamin E | Oxygen, ozone |

abnormal finding, this is not the case for vitamin $B_6$ upon taking oral contraceptive steroids, where it may be necessary to consume up to ten times the USRDA for this vitamin.[22]

## Effects of Macronutrient Consumption on Drug Metabolism

Dietary protein and carbohydrate can also have an influence on the rate of drug metabolism. In an interesting series of studies[28] healthy volunteers who did not smoke or drink, who did not use any drugs for three weeks prior to the study, and who were limited to consuming no smoked foods, brussel sprouts, cabbage, or other known inducers or inhibitors of the drug metabolizing enzymes were studied during 14 day periods. The first period comprised the customary home diet. The second period comprised a high protein (44%) low carbohydrate (35%) and the third period a high carbohydrate (70%) and low protein (10%) diet. Following this they returned to their home diets. The special diets were prepared by a metabolic kitchen at a major university hospital. For each subject there was determined the plasma half-life of antipyrene after an oral dose of 18 milligrams per kilogram on day 10 of each of the four periods, and similarly for theothylline at a dose level of 5 milligrams per kilogram on the last day of each of the four periods. It was observed that the half-life of antipyrene was markedly reduced under conditions of high protein intake and that a similar finding was made for theothylline. The differences due to a high carbohydrate diet was less significant than for protein.

The increased rate of drug metabolism (reduced half-life) presented here in human subjects is in accord with studies in experimental animals.[29, 30] Furthermore, similar findings obtained from feeding charcoal broiled beef (and which are independent of the protein content of the beef) were probably caused by the presence of polycyclic aromatic hydrocarbons as a consequence of the charcoal broiling.[31] The hydrocarbons in question have been previously shown to be potent inducers of the drug metabolizing enzymes.[32,33] Although the specific studies have indicated that there is considerable undividual variation in the responsiveness of humans to dietary change, the findings are of considerable clinical and pharmacological importance since they probably contribute to the large variation in the blood levels and blood action observed in different individuals or in the same individuals on different occasions. Increased rates of metabolism (or reduced life span) means a lower residence time of the drug in the body, generally associated with lower blood levels and, therefore, potentially a reduced pharmacological effect.

## Special Groups at Risk

### 1. Elderly

Adverse reactions to drugs are particulary liable to occur in the elderly. Reasons are that they are the chief drug users.[34, 35] The aging process may slow drug metabolism.[36] In the current context, it is important to understand that those who take the most drugs are likely to have the most precarious nutritional status due both to the effect of dietary restriction and the results of acute or chronic disease.[37-39]

Vitamin deficiencies often found in the elderly are those which may affect drug metabolism. Marginal deficiencies of vitamins A, E and C may occur as well as impairment in riboflavin status.[40-43]

Drugs used by the elderly may affect their vitamin needs and contribute to the presence of one or more vitamin deficiencies. Haghschenass and Rao studied serum folacin (folate) levels in 27 elderly patients receiving anticonvulsant therapy with diphenylhydantoin.[44] Although none of their patients showed evidence of overt megaloblastic anemia, serum folacin levels were extremely low in the patient group as contrasted with values for 25 control subjects. Authors comment that the lower serum folacin values were found in people on diphenylhydantoin over 60 years of age.

Osteomalacia is common in elderly people in whom it frequently coexists with osteoporosis. Osteomalacia may be due to abuse of certain laxatives including mineral and phenolphthalein.[45-47]

### 2. Alcoholics

Whereas acute ingestion of alcoholic beverages with drugs such as central nervous system depressants will tend to cause additive and depressant effects, alcoholics show an increased tolerance for certain drugs. On the

other hand, increased sensitivity of alcoholics to certain drugs such as anticoagulants may be on the basis of vitamin K deficiency induced by or associated with alcoholic liver disease.[48]

Deficiencies of fat and water-soluble vitamins which are common in chronic alcoholics may be exacerbated by intake of therapeutic drugs.[49] In circumstances in which ethanol increases the metabolism of other drugs, it may exert a sparing effect on potential drug-induced vitamin depletion.[50]

3. **Epileptics**

Children as well as adults with seizure disorders take anti-convulsant drugs on a long-term basis. Since these drugs have the potential for causing folacin and vitamin D deficiencies, dietary requirements for these nutrients in epileptic children are increased. Chronic anticonvulsant therapy can produce folacin deficiency both in children and in adults. However, an effect of folic acid replacement (high dose) therapy is a reduction in the serum concentration of diphenylhydantoin or phenobarbital which can lead to increased frequency and severity of seizures.[51, 52]

Anticonvulsant rickets and osteomalacia may be the result of induction of the hepatic metabolism of vitamin D. At risk are those on chronic high dosage anticonvulsant therapy who are not exposed to sunlight and whose intake of vitamin D is negligible.[53]

Infants born to women on anticonvulsant drugs may develop vitamin K deficiency manifested as hemorrhagic disease of the newborn.[54]

4. **Dieters**

In developed countries many individuals frequently modify their diets for the purpose of gaining or losing weight, or as self-imposed or physician-advised treatment of disease. Change in diet often means an alteration in the level of protein consumed. If the dietary change is during drug therapy, rate of drug metabolism may be enhanced, thus reducing therapeutic drug levels and drug efficacy (with high protein intake) or conversely can lead to slowed rate of drug metabolism with prolonged high blood levels of the drug and risks of adverse drug reaction (high carbohydrate intake).

5. **Malnourished Children**

Drugs at usual therapeutic dosages may be highly toxic or lethal to malnourished children. Identified causes are: reduction in body weight, slowed drug clearance, and impaired drug metabolism. The attending physician must decide whether to reduce the dosage of the drug (and perhaps not accomplish the therapeutic effects) or realiment the young patient with protein, vitamins, and minerals before the drug treatment, and run the risk of the child succumbing to the disease before the infection is treated.[55, 56]

## Summary

It is now recognized that marginal vitamin deficiency will largely result in reduced rates of drug metabolism and that the administration of drugs will often increase the need for vitamin intake. Also, the consumption of high protein diets will increase the rate of drug metabolism and reduce the residence time of the drug in the body thereby reducing its pharmacological effectiveness.

In United States populations there may be extensive marginal deficiency for vitamins as shown by a variety of government and nutritional surveys. Considering this general marginal deficiency state as well as the high variation in protein intake as a consequence of reduced calorie and/or therapeutic dieting, one might expect a large variation in the pharmacological response to drugs depending upon the nutritional state of the patient.

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# Dietetic Support of Medical Practice

Penelope S. Easton, Ph.D., R.D.

The importance of the nutritional status of the patient in acute and chronic disease states is well documented.[1] Actual assessment of the nutriture of an individual patient is difficult[2] and motivating a permanent change in food intake for health reasons is equally if not more difficult to achieve.[3] Physicians have the right to expect professional dietetic personnel to help them design appropriate dietary regimens, as well as to help patients achieve the desired behavior changes.

Specifically, physicians have the right to expect that registered dietitians (R.D.s) will provide the following patient information and services:

1. Assessment of current dietary patterns and self-prescribed supplements with attention to energy intake and use, actual foods eaten, and the possibility of nutrient excesses and/or deficiencies.
2. Summary of economic and/or lifestyle factors which influence food behavior change and affect the translation of the dietary prescription.
3. Comments and data useful for total nutritional assessment, possibly actual determination of assessment components such as skin fold, height and weight.[4]
4. Food composition data which would help the patient to follow the desired dietary regimen or render it inappropriate.
5. Information on current diet fads and faddists as well as accurate data about additives, preservatives and food preparation methods.
6. Preparation of educational materials and methods adapted to the patient's ethnic, religious and educational background.
7. Provide information on feeding modalities, i.e. supplements and tube feeding.
8. Provide a follow-through system for the patient to receive dietetic support and additional information as there is a change in needs, attitude or disease condition.
9. Monitoring of food intake and energy used in both in-hospital and outpatient settings.
10. Information about the patient's comfort and wishes for foods which may be desirable and possible when total food intake and/or the prognosis is considered.

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## Professional Dietetic Personnel

The title registered dietitian (R.D.) can only be used by a person with approved academic qualifications, clinical experiences and a passing score on the registration examination (see Definition Table). There are several areas of emphasis in dietetics: clinical, community and administration. However, the R.D. is expected to have entry level competencies in all of these areas. For the rest of this paper, the term dietitian or R.D. will be used to describe the dietitian who is most often directly related to patient care (general or clinical or therapeutic) and the role expectations will be described for dietitians with these competencies.

The dietetic technician is a new member category of the American Dietetic Association. The technician functions as supportive personnel under the registered dietitian in a subspecialty such as nutritional care. This is an Associate Degree level training. The dietetic assistant training program (usually less than one year at a vocational school level) is also an American Dietetic Association approved program.[5]

DEFINITION TABLE[5]

REGISTERED DIETITIAN (R.D.)

A specialist educated for a profession responsible for the nutritional care of individuals and groups. This care includes the application of the science and art of human nutrition in helping people select and obtain food for the primary purpose of nourishing their bodies in health or disease throughout the life cycle.

CLINICAL DIETITIAN (R.D.)

The clinical dietitian, R.D., is a member of the health care team and affects the nutritional care of individuals and groups for health maintenance. The clinical dietitian assesses nutritional needs, develops and implements nutritional care plans, and evaluates and reports these results appropriately.

DIETITIAN TECHNICIAN

A technically skilled person who has successfully completed an associate degree program which meets the educational standards established by The American Dietetic Association. The dietetic technician, working under guidance of an R.D. or an A.D.A. dietitian, has responsibilities in assigned areas in foodservice management; in teaching foods and nutrition principles; and in dietary counseling.

There is much confusion in the use of the title "nutritionist" because it has no legal definition as

registered dietitian does. The description of Galbraith summarized the confusion this way.[6]

> Nutritionist (non-medical) are not as precisely defined; indeed, that title may be (and is) assumed by individuals with a wide variety of credentials (some of which are authentic, recognized, and prestigious, and some of which are obscure or even non-existent). A small cadre of highly qualified physicians have passed boards in human nutrition as established by the American Board of Nutrition; accreditation of nutrition as a medical subspecialty is advocated.

Physicians have the right to expect that dietetic professionals will have the appropriate credentials, fulfill their continuing education requirements and be paid wages commensurate with their training and experience. Adequate dietetic services cannot be provided by even the most competent dietitians unless sufficient numbers of them and supportive personnel are hired.

### Dietary Histories

For many if not most patients, adequate medical treatment requires information about the patient which is difficult to obtain and assess. Food intake falls within this realm. Food patterns are highly personal and often are a very private part of a patient's life. They involve feelings of guilt, for no one in today's world has escaped information about what he or she should or should not eat. Food habits involve feelings of pride, self image, social behavior, success, "protection" of the food provider and accomplishment in food preparation or hospitality. Food habits are economically and socially influenced and are subjected constantly to change, although these changes may not be because of a diet prescription.

Aging, marriage, children, change of locale, health circumstances and new products on the market must all be considered in food habit changes. A dietary history can determine the direction and extent of change possible as well as provide an estimate of present and usual nutrient intakes.

The data from diet histories should be considered in both in-hospital and outpatient care. The frustration of a patient who follows a strict religious regimen and yet receives "forbidden" foods with the weak excuse "you're allowed it for medical reasons" may be great and probably unnecessary. This stress and anguish could be lessened with personalized dietary care.

A good dietary/activity history takes from one to two hours to determine and may take an additional hour or adequate computer time to calculate. Dietary histories may be "contaminated" with a variety of medical personnel asking questions such as "Do you eat well?" "What do you eat?" "Do you follow your food plan?" Casual questions may make the patient hostile or defensive. It takes a skillful interviewer to provide the supportive climate that allows the patient to give accurate information concerning food habits.

Food habits are indeed a very personal subject perhaps more personal than sex habits. Certainly in comparison, food habits involve far more time and money!

Discussion of food intake usually involves the answering of many questions concerning the adequacy of the diet and evaluation and correction of the dietary information the patient already has. Although answering these questions when asked during the dietary history interview may render the history useless as "pure" research it makes the interview become a powerful tool for the dietitian and a good learning situation for the patient.

The use of a dietary record or diary brought in by the patient prevents much of this interchange of information and may include more "expected" behavior than "actual." The assignment of dietary histories to a nondietetic professional also may produce expected rather than actual food patterns. The sheer number of histories necessary may make it imperative that the dietetic technician take some diet histories. The assessment of these, however, and the supervision of the technician are an integral part of the registered dietitian's responsibilities.

### Dietary Modifications

The physician has the right to communicate directly with the R.D. about a patient's food intake and dietary needs - he/she should not have to talk about dietary prescriptions to a "girl from the kitchen" or a nurse's aide. So-called routine diet orders are often ill-advised and may put unnecessary and even life threatening restrictions on patients. For example, the postsurgical diet (called clear liquid or some similar term) even if eaten or drunk, which it rarely is, may cause severe deprivation of all nutrients, even energy. A "high energy, high protein" liquid diet is theoretically possible, but in actuality the energy intake is so low that the protein component will all be used for energy, not for tissue repair. Patients improve at very different rates and therefore changes in diet orders should reflect this rather than follow a standard number of days. The use of formulated diets is advisable in treatment of debilitated patients, but the numbers and degree of debilitation could be greatly reduced with proper dietary monitoring of all patients.

The diet "as ordered" and even "as delivered" is far different from the diet as eaten. In many instances, even the diet as eaten differs from the diet as absorbed! Vomiting and diarrhea are rarely noted as requiring replacement of food to prevent debilitation. Many hospital trays are delivered to patient's bedside and then no one sees that the food is transferred from the tray to the patient's mouth. The milk carton may be impossible

for a weak patient to open. Patients, roommates and visitors may have all eaten from the tray and, therefore, chart notations about food eaten may be inaccurate. The food as well may have been put in the waste basket, down the drain or in a drawer.

The feelings about food are profoundly important, especially in a hospital. Food represents pleasure, punishment, threat or even a waste of money. Food intake should be ascertained in a nonthreatening way if the assessment is to be accurate and useful to the physician in decision making.

The use of a diet order "as tolerated" or "selective" is a reasonable one for the physician concerned with the individualized care of the patient. However, the "as tolerated" diet may become someone else's idea of "as tolerated" not the patient's or, if the patient is consulted, the same foods may be ordered for days with no rechecking to see if the toleration has changed. "Selective" menus usually are chosen far in advance of the meal being considered. They may be chosen by a family member, who also wishes to eat, or who understandably thinks the patient might eat a little bit of several items by the time the meal arrives. They may be checked by the patient who feels ill at the moment but might feel very different later on. They may be chosen by hospital personnel who wish to help but do not know the patient's likes and dislikes, nor can they predict what the patient's appetite will be four meals hence. The admitting personnel by observing a person without teeth or with ill-fitting dentures may order a "Soft Diet" or what is even worse a "Soft Bland Diet." This convinces the patient who eats well without teeth that he or she is being punished or is really more critically ill than has been told. Such orders may so severely restrict food intake that malnutrition occurs.

Difficult as it is actual food intake must be determined as accurately as possible in order to monitor the prescribed changes. For example, a person on a restricted sodium diet who eats almost nothing might appropriately be given even a higher sodium food if the total amount of food consumed is acutally considered, not the sodium content of the food as served. Multiple restrictions and recommendations may cancel each other out or so restrict intake that actual starvation may occur, such as a high protein, low fat and sodium restricted diet which may be impossible to translate into ordinary foods.

Dietary prescriptions are difficult to determine and even more difficult to follow. Food has a variety of components and food preparation may alter the nutrient contribution significantly. Physicians have the right to expect the dietitians to notify them if the diet prescription is inappropriate for the patient or unreasonable in terms of food composition. Sixty grams of carbohydrates may be unreasonable for a person needing 3000 Kcalories of energy a day, but may be possible for a person using 1200 Kcalories of energy.

The use of formulated diets may make prescriptions easier but they are expensive, unpalatable and unpleasant for the patient and may not produce the nutritional benefits expected even if consumed.

The physician should expect to have persistent problems of food intake pointed out and to have continuing quantitative data recorded in the patient's chart. A notation, "ate approx. 540 Kcal, 20 gms. Pro, 10 M.Eq. Na" is useful data, but a notation that "patient ate well" - or "half his meal" is not.

## Diet Counseling

Effective diet counseling is influenced by many social and medical factors. Few if any patients have been untouched by nutrition as a political issue. The dramatic presentations of the dangers of additives, perservatives and colorings, food preparation techniques such as barbecuing and effects of high sucrose diets, bombard the consumer. The physician has the right to expect the registered dietitian to give him or be able to find current information about food components and food chemistry.

The treatment of disease by diet is as much determined by myth and tradition as it is by actual research and physiological fact. The dietitian can help the physician weigh the possible benefits and dangers of food restrictions and regimens. Some restrictions may have been made many years ago for conditions no longer of importance or by professionals no longer in attendance, but the taboos remain. If all professionally given taboos are included along with the admonitions of relatives and friends, the mass of restrictions may become health threatening.

Handing the patient a printed diet pattern or even a book cannot deal with all these questions and uncover necessary information. A "one shot" diet instruction by even the most competent dietitian cannot do this either. Diet instruction takes time and some follow-through system.

Adherence to dietary modifications is more difficult than adherence to medications, because the change may be unpleasant and often it involves constant use of knowledge and decision making strategies. How does a patient eat at a party, on an airplane, or a cruise ship, at a fast food restaurant, in a school cafeteria, from a refreshment truck at a construction site or at a family reunion? Following dietary advice is the responsibility of the patient and he/she is often ill-equipped in terms of knowledge, motivation and adequate professional support.

The difference in "knowing" and "doing" has been noted by many counselors. In no area does this have a greater impact than in food habit changes. The

responsibility for food intake is ultimately and entirely the patient's. The motivation for change in food intake often needs to be stronger than long term health benefits or even the "scare" of getting worse. The lack of success in weight loss programs documents this well. However, some people do change their food habits. These changes can be made compatible with health needs if proper counseling, support, follow-through and information is available. Group dietary counseling is rarely an effective way if used by itself, Zifferblatt and Wilbur have noted:[7]

> Furthermore guard against the suggestion that their time can be used most effectively by counseling patients in groups. Successful change is more likely when nutritional programs can be tailored to individual needs. Although group counseling is often an efficient way to communicate general principles of nutrition and behavioral change, individuals within a group differ considerably in personal characteristics and life style.

## Cost Effectiveness

Dietary support of medical practice can no longer be considered a luxury, but must be considered an integral part of treatment even if for no reason other than the prevention of malpractice suits for iatogenic malnutrition or food drug interactions. In a more positive view, adequate dietary support is necessary for the physician to answer the questions of the consumer conscious patient.

Dietary management is difficult, costly and has not had a high success rate. The benefits of weight control are not questioned in management of many diseases but the cost effectiveness of good dietary counseling for obesity needs to be documented. It has been demonstrated that the public is willing to pay exorbitant prices for food and nutrition information of highly questionable value. Although the actual pamphlets and advice may be "free," people pay inflated prices for ordinary foods in health food stores, pay lecturers and so-called nutrition experts for group and individual advice and buy large quantities of vitamin and mineral supplements with unknown and possibly life threatening consequences. The skill of these faddists and charlatans is enhanced by their lack of need to be scientifically sound and ability to employ scare techniques and the promise of miraculous results. Their ability to draw followers willing to pay large amounts of money for their services may involve an added cost to patient care in at least the short term.

Optimum dietetic support may divert some of the money spent for fads and faddists to improve total health habits and enhance the patients evaluation of the physician as a focal point of health information. The old "ask your doctor before starting a diet" is often ignored now because of the mass of information available to the lay public.

No real studies of cost benefits of dietary support have been done. Does good dietetic counseling cut down the number of hospitalizations, save physician and nurse time, increase patient comfort and peace of mind and prevent some complications and disease states? If any or all these are so, how much money does this save? The lack of many prepaid programs of medical care, and the lack of third-party payments of dietetic services may make the physician reluctant to demand adequate dietary care for patients.

The cost benefits of treatment of such nutrition related conditions such as obesity is obvious if not documented. Similarly, the treatment of constipation whether contributing to debilitation or merely discomfort can be influenced by good dietary care even to being cost effective in terms of fewer enemas and laxatives.

Although cost effectiveness can be demonstrated in some cases, the fact remains that although adequate dietetic support is recognized as being important, it is one service that may be "cut" when crisis situations are considered.

## The Challenge

One of today's major challenges for the physician is providing adequate nutritional care for his/her patients. The determination of food intake, energy use and life patterns of eating is time consuming and requires special skills. Equally difficult is providing the knowledge and climate for change.

1. Lack of precise evaluation methods to determine nutritional adequacy.
2. The scarcity of information regarding the nutrient contributions of foods.
3. The prevalence of "free" information, much of it not true industry inspired and involving "scare" or threat.
4. The social messages regarding food habits which are not compatible with health needs.
5. The limited number of appropriately educated dietary personnel.

The explosion of information in all areas of medicine have left physicians with some impossible choices. If they "keep up" with all areas of medical practice, they have no time to see patients. If all the courses "necessary" were included in medical school, it is conceivable that medical school could be extended interminably.

In order to keep up in nutrition and food science, the physician needs technical and continuing support. The physician then has the right to expect the registered dietitian to furnish adequate dietary support if the following conditions are met:

1. Sufficient dietetic professionals are employed and allowed to function as professionals.
2. Adequate information and time are given to the dietitians to determine the patient's food pattern and

preferences, to prepare the instructional materials and to teach and follow through with the patient.

3. Assessment of actual food intake is monitored and the data used in determining the patient's treatment.

4. The dietary restrictions, laboratory tests and drug prescriptions, and other orders such as for physical therapy and psychiatric consultations are all considered as part of the total care and reviewed in terms of the patient as a human being not a group of medical problems.

5. The physician is available to discuss the effects of the dietary orders and need for change when other factors take precedence.

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# Nutritional Care of the Patient in Office Practice


**Jeanne R. Rackow, M.S.**


Nutritional care is increasingly an integral part of the total care of patients.[1] Malnutrition — either undernutrition or overnutrition — is one of the most common and vexing problems a physician observes in practice. When a patient is hospitalized, chances are that the nutritional care will be good if the physician has the resources of an effective health team available and utilizes them. But the nutritional needs of a patient do not suddenly appear when he enters the hospital. Nor do they disappear when he is discharged. In many practices 75% to 90% of patient care takes place in the office, away from the hospital resources. Although there is a need for continuing nutritional care in the office, frequently the subject never comes up or efforts to meet this need fail dismally. Hewitt et al.[2] maintain that less than one half of the patients continue for more than four weeks with weight reduction programs. Other studies[3-5] indicate that the success rate is even less.

This article discusses the role of nutrition in medical practice. It examines the reasons for failure of efforts to provide nutritional care of the patient. Finally, it examines some alternative approaches for incorporating nutritional care into practice effectively, and at a cost the patient can afford.


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### Role of Nutrition in Medical Practice

The role of nutrition in medical practice today is changing because the focus on the relationship of nutrition to health is changing. Nutrition affects health in at least three ways: it is curative of disease, it may prevent disease, and, it is one of the therapeutic measures employed to treat disease.[6]

First, the intake of certain nutrients is curative of a small group of diseases which were prevalent at the turn of the century. Today it is rare to find any of these deficiency diseases except in individuals whose food intake is really bizarre. The almost magic vitamins are available in the corner drug store, in processed foods which have been restored or enriched with them, and even in foods fortified with nutrients not present in the natural state. More sophisticated processing, storage and distribution of foods in this country have made our diets more varied, thus minimizing the possibility that a nutrient will be deficient.

About the only place the symptoms of deficiency diseases appear is in medical textbooks. This can be illustrated by pointing out that pellagra was epidemic in Georgia in the summer of 1922, with 10,000 deaths and another 100,000 reported cases. A few years ago, a medical school in Georgia was unable to find one case in the state to show medical students first-hand the

symptoms of pellagra. Thus, it is logical that physicians no longer concern themselves with nutritional care in order to cure disease.

However, nutrition is still important in an ancillary way; it is one of the therapeutic measures that can be employed to treat illness. Some of the newer modalities of nutritional care have achieved notable results with patients with cancer, hypertension and gastrointestinal disorders. Also, good nutritional status may improve patient response to other therapies that the physician may use by reducing the incidence of infection and complications and by shortening the time of convalescence.[7]

Second, faulty nutrition may be one of the underlying causes of illness. There are still diseases with unexplained, complicated etiologies. Often, there is a close association of the incidence of these diseases with poor dietary intake.

Third, the focus on nutrition has moved from its role as curative of deficiency disease to that of therapeutic intervention in and prevention of disease, and this affects the focus in medical practice. Nutritional care of the patient in the office is still important. However, the role it plays has changed. But all too often, it is ignored because of the press of other therapeutic needs.

## Need for Nutritional Care Is There

The public today is more aware than ever before of the effect of adequate nutrition on health. The newspapers and television talk shows devote considerable space to the claims and counterclaims about nutrition, and even the comic strips have their commentary.

A recent study showed that a majority of the people would prefer getting their information on nutrition from their family physicians.[8] Another study revealed that, in fact, they most often get their information from what can be called paperback nutrition. Current estimates indicate that we waste $½ billion a year on food faddism. Failure to meet the public's need for nutrition information in medical practice has created a vacuum which has allowed the diet hucksters to flourish. Actually, the old-time medicine man has simply taken on a new guise as the natural food store proprietor or the author of the latest paperback.

## Reasons for Inadequate Nutrition Counseling

One reason that physicians do not instruct patients about diet is patient noncompliance. Nutrition counseling is often a frustrating, nonproductive experience for both the physician and the patient. Why is noncompliance such a common failing of nutrition counseling?

### Patient Noncompliance Because of Poor Assessment

First, no two people are alike. They do not look alike, but the difference is more than skin deep. Each person has a nutrition individuality. In part, what makes one patient different from the next are the food habits he has acquired. Unless the counselor works within the framework of a person's food habits, his chances of changing nutritional status are minimal. When a patient is given an injection, the physician knows that the medication is where it belongs. All too often, a patient is given a set of dietary suggestions. It is the same set that is given to every other patient, with no attempt to fit it into his usual pattern of living. It is a safe estimate that the recommendations are ignored more often than they are followed.[9] A physician cannot make a patient follow instructions so the challenge is to make him want to follow them. The only way to do this is to make a patient comfortable with those changes that are needed, and this means finding out what determined his food habits in the first place.

Next, people have many beliefs and feelings about food. Identification of those beliefs and feelings may be more important than determining nutrition information that the patient may have. A study by Schwartz[10] showed that attitudes toward nutrition do mediate dietary practice. It is surprising to find out how much the average person knows about nutrition, or thinks he knows. All too often the information he has is wrong. Whether it is right or wrong, the important thing is to find out how he believes it applies to him. Carruth and associates[11] showed that an identification of attitudes and a change of those attitudes resulted in a change of eating habits.

Finally, it is important to determine what a patient is capable of learning. If instruction does not begin at his level, or if the expectations are set too high, the patient may not be able to reach the goals set for him. Often, he may not be willing to admit he cannot follow the instructions for he does not want to disappoint the physician, or he is afraid that he will be considered ignorant.

It takes good assessment to obtain information about present food habits, beliefs and feelings about food, and the ability of a person to learn. Unless these factors are taken into account, in essense the physician is telling the patient to go home and use his willpower which has not been effective to date. It is not surprising to find noncompliance with dietary instructions that are not based on patient assessment.

### Failure to Initiate Discussion of Need for Dietary Change

Certainly the use of a diet sheet without assessment

is high on the list of office practice which is counterproductive to delivery of good nutritional care. Equally bad is the practice of ignoring a person's need for help altogether.

For example, when a patient comes into the office with a problem of overweight, there are often a myriad of associated, recurring problems. The physician knows that the patient has a weight problem. The patient knows he has a problem. If the physician does not bring the subject up, chances are that the patient will not either. The physician may assume that if the patient really wants to lose weight he will ask for help. Also the physician may hesitate to make the patient feel guilty. Most people already feel guilty about excess weight and they are reticent to admit to anyone, including their family physicians, that they have a problem that they cannot handle. A patient has a role to play in his own care, and a physician needs to promote that ability to care adequately for himself. But the patient needs help in planning this role.

## Lack of Up-to-Date Nutrition Information

Many physicians in private practice are ill equipped to work with patients who have nutritional needs. Studies[12,13] have shown that physicians who had received nutrition instruction in medical school or had continuing education training scored significantly higher in knowledge and use of nutrition in practice.

A survey in 1976 conducted by the Department of Foods and Nutrition of the American Medical Association[14] revealed that less than one fifth the medical schools offered nutrition as a required course of study. Furthermore less than one third the schools offered postgraduate or continuing education studies in nutrition. The number is growing rapidly, but the fact remains that a majority of physicians in practice today were not given information on nutrition or how to use it in medical school. Opportunities to gain information through continuing education are limited.

Olson[15] believes that clinical nutrition cuts across all branches of medical practice, and nutritional sciences are pertinent to all the basic preclinical sciences. Nutrition should be included in the medical school curriculum so that it correlates with practical application in the clinical setting. Also, continuing education workshops should be available which will provide current information on nutritional care and in addition present ways to utilize that information and develop tools for nutritional assessment of the patient.

## Lack of Time and Cost of Effective Counseling

Good nutritional counseling takes time, and time is money. At one time people were not willing to pay what it would cost to work with them but today they are spending hundreds of thousands of dollars to other sources for that same help. Studies have shown that they would prefer being helped by the physician who traditionally is the one to whom they look for health care delivery.

## Physician's Role in Nutritional Care of Patients in Office Practice

The constraints of time and the high cost to the patient prevent most physicians from supplying the necessary nutritional support by themselves. There are alternative ways in which nutritional support can become part of office care. Just as the utilization of a team of health professionals has proven to be the most effective way to care for patients when they are hospitilized, team approach to nutritional care for the office patient is also efficient and economical.[16]

However it is the physician who has been charged with the major responsibility for medical care in his community. He must be the initiating force. Without his visible support and encouragement, the effectiveness of any health care team that he may develop will be minimal. The physician should screen his patients to identify those who need counseling. He then should discuss the problem and develop a program for intervention with the patient. Once he has accomplished this, he has a number of alternatives. He may elect to work with the patient if the change in diet is minimal and little follow-up care will be necessary. Many physicians prefer to give initial instruction to the patients. Often however the patient cannot afford the cost of dietary assessment and continuing reinforcement which is necessary for successful therapy when these tasks are performed by the physician.

An excellent resource is the consulting nutritionist who is trained to provide the continuing dietary management the patient needs thus maximizing the work begun in the physician's office. She may be an employee of a group of private practitioners. She will supply professional therapy at a cost the patient can afford as well as updated nutrition information for the physicians. Some consulting nutritionists have private practices and see patients by referral from physicians in the community.[17]

Often the resources for nutritional support are available already in the office. The expanded role of the professional nurse includes the nutritional care of her patients. The development of assessment and counseling skills in the nursing staff already in the practice may provide the continuing care which is needed. Tools for nutritional assessment and strategies used successfully to modify food intake and maintain results are available.

They can be incorporated into existing private practices with little effort.[18-20]

## Concluding Comments

Patients need help with their nutritional problems not only when they are hospitalized but on a continuing basis as part of the care they receive in office practice. A majority of the public would prefer information on nutrition from their family physicians but most often they get information from other sources. Patient noncompliance is common when dietary counseling without sufficient assessment and follow-up is attempted. This is a frustrating experience for both the physician and his patient. This plus the constraints of time and the high cost to the patient of adequate counseling have deterred many physicians from providing nutritional care. Alternatives are available for delivery of nutritional care. Nevertheless it is the physician who has been charged with the major responsibility for medical care in his community who should initiate therapy. He should discuss the problem with the patient and chose the appropriate approach for incorporating nutritional care into the total care for his patient.

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# Pediatric Nutritional Determinants of Chronic Diseases


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We owe the present average life span of approximately 72 years to medical and public health advances which have decreased infant and childhood morbidity and mortality. However, longevity has not actually increased in the last century since chronic diseases continue to doggedly plague technologically advanced societies. These diseases include coronary and hypertensive cardiovascular disease, diabetes, obesity and cancer.


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Coronary heart disease (CHD) incidence appears to have plateaued and decreased in the last decade. However, CHD remains a current public health problem and hypertension remains the paramount cause of death among blacks. The prevalence of cardiovascular risk factors in western societies also remains impressive. Approximately one third of all adult males have serum cholesterol levels above 260 mg/dl and are exposed to a six-fold increased risk of having a premature myocardial infarction. According to the Ten-State Nutrition Survey, 10-50% of the total population is obese; 10-30% of adolescents are obese; 20% of all Americans are hypertensive.[1] The concept of risk factors as identified by the Framingham investigators may in fact be a major medical and

health discovery of the century, as important as the "one-germ-one disease" theory of Pasteur.[2] The elucidation of host and environmental factors which interdigitate and interact in a complex "mosaic" manner remains a most fascinating model of coronary and hypertensive heart disease as a "chronic disease."

It may in fact appear strange to consider CHD as a chronic disease since its clinical manifestations may be as acute as sudden death. However, the metabolic and subcellular pathogenetic progression of this disease may occur from infancy or even intrauterine life. Atherosclerosis appears to have a long incubation period; hence, our justified concern with lifestyle and infant feeding practices.

We postulate a "tri-composite" concept of atherosclerosis. One part relates to the aging process and is an expression of the mortality of man yielding to the inexorable press of time, the result of a universal genetic endowment which sets intracellular biological "time clocks" to the Biblical average life span of "three score and ten." The second component is also inherited and can be exemplified by the specific genetic penetrance which results in familial types of hyperlipidemia, i.e. hypercholesterolemia and/or hypertriglyceridemia and results in the acceleration of the atherosclerotic process. Approximately 8% of the population exhibits Type IV hyperlipidemia and from 2-4%, Type II hyperlipidemia. Hyperlipoproteinemia can be identified in childhood and has a prevalence rate of about 1 in 200 newborns in U.S.A. populations.[3] The disease in the homozygote state is associated with premature heart disease before the age of 20, while in the heterozygote state is associated with coronary heart disease in the fourth or fifth decade. Diabetes mellitus, another inherited disorder, has a prevalence of from 2-4% in the general population and also constitutes a considerable public health problem.

The third part of our concept of atherosclerosis is potentially more amenable to control and relates to a complex interplay of host and environmental factors. Against a background of the variable genetic penetrance of the familial or acquired hyperlipidemias, the presence of "national dietary hypercholesterolemia" or "universal hyperlipidemia" results when the nutritional environment or national diet pattern is high in calories, saturated fat, dietary cholesterol, oligosaccharides and alcohol. It is this third component which may be primarily responsible for the widespread elevated lipid levels found in middle-aged man.

Most serum lipid disorders which induce atherosclerosis have their roots in childhood. Some are inborn errors of metabolism and others are acquired or associated with various diseases (hypothyroidism, nephrotic syndrome, hepatic disease, etc.) Changes in infant feeding practices such as bottle feeding vs. breast feeding, early introduction of solid foods, infant overfeeding and baby foods high in sodium and oligosaccharides, may be important contributors to cardiovascular risk factors operating silently in infancy and childhood.

In intrauterine life and infancy, cholesterol and lipids are important participants in the cellular structure and function of the central nervous system, and influence the fragility and permeability of membrane integrity. Serum cholesterol increases dramatically the first few days of life from 97.4 mg/dl in cord blood to 146.6 on the 5th day and to 154.8 mg/dl on the 8th day.[4] The optimal level of serum cholesterol for the support of multiple physiological functions during the infant's growth and development is not known. Suggested "normal limits" of serum lipid and lipoprotein cholesterol concentrations in subjects age 0-19 years have been proposed.[5] (Table 1).

Serum triglyceride levels also increase rapidly during the first year of life.[6] By the end of the first year, serum lipid values approach those of young adults and appear to be closely related to early dietary practices. Breast-fed babies were found to have significantly higher cholesterol levels (146.8 mg/dl) at the age of two to four months compared to bottle-fed babies (Similac — 128.8 mg/dl).[7] However, after the age of four months, there was no significant difference in serum cholesterol levels.

**Table 1. — Suggested Normal Cholesterol and Serum Lipid Values for Children.**

| | Total mg/dl Cholesterol | Triglycerides mg/dl | LDL mg/dl | HDL (mg/dl) Males | HDL (mg/dl) Females |
|---|---|---|---|---|---|
| Cord Blood | 50-95 | 10-15 | 20-45 | 30-55 | 30-55 |
| 1-19 yrs | 120-230 | 10-140 | 50-170 | 30-65 | 30-70 |

## Effect of Infant Feeding Practices on Serum Cholesterol and Adipose Tissue Fatty Acid Composition

A comparison of a formula which contains 80% corn oil and 20% coconut oil with unmodified cows milk fed during the first year of life revealed that the unmodified-milk-fed babies had significantly higher serum cholesterol levels during the first year of life.[8] This was probably due to the hypocholesterolemic effect of linoleic acid found in the modified formula. Linoleic acid is a required fatty acid for normal growth; 2-3% of the total calories should be provided by linoleic acid in order to avoid a deficiency of this essential fatty acid. Human milk provides 4% of its total calories from linoleic acid while the modified formula provides 22.3% of the calories from linoleic acid.[9] (Table 2).

A relatively high intake of polyunsaturated fatty acids may affect cell membrane fragility, permeability or

Table 2. — Comparison of Caloric, Cholesterol and Lipid Content of Breast Milk, Cows Milk and Similac.

| | Breast Milk | Cows Milk | Similac |
|---|---|---|---|
| Calories (per 100 ml) | 71 | 69 | 67 |
| Fat (g %) | 3.8 | 3.7 | 3.4 |
| Cholesterol (mg %) | 20 | 14 | 1.5 |
| Linoleic acid (g/100 g fat) | 10.6 | 2.1 | 35 |
| Percent calories from fat | 54 | 48 | 46 |
| Percent calories from linoleic acid | 4 | 1.0 | 22.3 |

function. Animal studies suggest that the lipid composition of the central nervous system is not easily altered by dietary fat. Large amounts of alpha-tocopherol may be required to prevent intracellular peroxidation which may be induced by a high intake of polyunsaturated dietary lipids. In adults, Christakis et al found no statistically significant differences in mean levels of alpha-tocopherol in men who had been on a serum cholesterol lowering diet (P/S ratio 1.25) for up to four years.[10]

Dietary fat intake, in addition to inducing changes in serum lipid levels, induces changes in adipose tissue composition. Widdowson et al found that the relative amount of linoleic acid was the same in Dutch and British infants at birth, i.e. 1-3% of total fatty acids.[8] It increased rapidly in the Dutch infants to 25% of adipose tissue composition the first month, and to 32-37% by the fourth month following intake of corn oil rich formulas. Linoleic acid never exceeded 3% in the fat of the British infants. The differences between the adipose tissue fat composition of the infants in the two countries was attributed to the nature of the fat in the milk they received, as British infants received cows milk with only minor modifications. For the past ten years, many Dutch infants have received milk in which all of the cows milk fat has been replaced by corn oil. The relationship between type and amount of dietary lipids and adipose tissue composition in infants may have profound metabolic significance with regard to the atherogenic process.

It is unknown whether highly unsaturated adipose tissue in children may be associated with decreased serum cholesterol levels later in life and may, therefore, be a factor in preventing atherosclerosis. No information is available regarding whether degree of saturation of body fat is related to cell multiplication and the likelihood of obesity later in life. Although dietary fat intake induces changes in adipose tissue composition, it is unknown if similar changes occur in the fatty acid composition of arteries, the central nervous system, cell membrane, and other cellular and subcellular components.

The "safety" of a low saturated fat, low cholesterol diet beginning in infancy has been evaluated; however, no definite conclusions have been reached. Dietary intervention, however, may be necessary in special circumstances such as Type II hyperlipidemia during infancy, although it is not generally recommended by the Committee on Nutrition of the American Academy of Pediatrics before the first year of age. This decision was reached because a low dietary cholesterol diet during infancy may be harmful to the growing brain which requires cholesterol for normal development.

Studies in experimental animals have suggested that high cholesterol feeding in early life will reduce serum cholesterol levels later in life; this, however, has not been proven for human infants. Friedman and Goldberg tested this hypothesis by comparing breast-fed and bottle-fed infants. Breast milk contains 26-52 mg cholesterol per 8 ounces (P/S ratio 0.8) whereas a widely used milk formula contains 4 mg of cholesterol per 8 ounces (P/S ratio 1.2). After 4-6 months, both groups switched to skim milk, taking approximately 200 mg cholesterol daily from all sources. The breast-fed infants had significantly higher cholesterol levels at 2-4 months, but after the first year, approximately the same serum cholesterol levels were found in both groups without any significant difference. It is concluded from this study that no protection against high serum cholesterol in later life is likely to be attained as a result of the feeding of a high cholesterol diet early in life.[7]

## Serum Cholesterol in Preschool Children

After the neonatal and infancy periods, serum cholesterol levels continue rising in normal children up to the prepubertal period, i.e. ages nine to 11. The prevalence of high serum cholesterol levels increase from 0.5% in cord blood to 1.3% in the preschool children due to genetic and/or environmental factors.[11]

A child of a father who had a premature myocardial infarction (M.I.) (under age 50) has a threefold greater chance of having an elevated serum cholesterol level compared to a child of a non-M.I. father. This increased chance of developing an elevated serum cholesterol level continues from the preschool age forward to school age and into adolescence.[12] However, children of parents with premature myocardial infarction in a low coronary heart disease country (such as Greece) do not exhibit significant differences in serum cholesterol and lipid levels when compared to children of healthy parents from the same environment.[13] The differences between these two countries of high (U.S.A.) and low (Greece) risk factor prevalence in childhood may be due to genetic hyperlipidemias with early manifestations in the U.S.A. and later (after age 20) in Greece.[13] However, the extent to which ethnic diet patterns may modify, prevent or predispose to hyperlipoproteinemia is also a likely factor.

Other risk factors such as smoking or type A behavior may play a more serious role in the etiology of CHD in the USA than in Greece.

Serum cholesterol levels of children one to 17 years of age have been obtained as part of the Health and Nutrition Examination Survey. The mean serum cholesterol was found to increase rapidly from 165 mg/dl in the first year to 176 mg/dl the second year for boys and girls. The mean serum cholesterol ranged from 168 to 180 mg/dl during the preschool years (two to six years). Girls were found to have higher serum cholesterol levels than boys in every age group. Black boys had higher mean serum cholesterol levels than white boys for every age group. Similar patterns were found for black girls compared to white girls.

## Serum Cholesterol in the Pre-Adolescent and Adolescent Periods

Although most studies appear to agree that one in 150 to 200 newborns have hypercholesterolemia, the prevalence increases with age. A study of school children six to 14 years of age in the Southern California Conference of Seventh Day Adventists Church Schools revealed that 7% had serum cholesterol levels above 220 mg/dl.[14] The mean serum cholesterol ranged from 161.2 mg/dl to 184.9 mg/dl for the age groups nine to 14 years. A peak level of serum cholesterol was found at the ages of ten to 12 followed by a subsequent dip. A similar dip in serum cholesterol levels was also reported by Hennekens et al; thereafter, cholesterol levels continue to rise to adulthood.[12] The dip in serum cholesterol at midpuberty may be related to growth spurt and to the rapid increase of serum testosterone and estrogens but those relationships have not been elucidated. Schilling et al studied the serum cholesterol and triglyceride levels of the late teenage period starting at age 18.[15] An accelerated rate of increase in serum cholesterol was noted between ages 19 and 30. They advanced the concept of "cholesterol-years" of exposure to rising levels of serum cholesterol which was hypothesized as linked to the atherogenic process. A study of serum cholesterol levels of adolescents, however, suggests substantial variability among divergent ethnic and racial groups in adolescent boys and girls in New York City.[16] Table 3 summarizes recent studies of serum cholesterol levels in childhood.

Serum cholesterol levels appear to be closely related to sociocultural characteristics of the eating patterns of children. As an example, the mean serum cholesterol level of 5-15 year old Mexican children was found to be 99.9 mg/dl in contrast to the mean cholesterol level of comparable Wisconsin pupils which was twice as high (186.5 mg/dl).[17] The conclusions of this study suggest that the cholesterol level characteristics of these two populations have been developed by elementary school age as there were no differences in mean serum cholesterol between the 5-9 year age group and the 10-14 year age group in either study population. There are, however, no longitudinal data in children and adolescents indicating changes of serum lipid levels by age and relationships to their nutrition and sociocultural environment.

**Table 3. — Mean Cholesterol Levels in Children by Age.**

| Investigators | Sex / Age | Cholesterol (mg%) |
|---|---|---|
| Harrison & Peat 1975 | M/F Cord blood | 98.5 ±22.1 |
| " | M/F 5th day | 146.6 ±24.6 |
| " | M/F 8th day | 154.8 ±24.3 |
| Beal 1970[52] | M/F 1-6 yrs | 168 (95-246 range) |
| " | M/F 6-14 yrs | 167 (107-249 range) |
| " | M 14-18 yrs | 156 (155-206 range) |
| Wiese et al 1966[53] | M/F 1-5 yrs | 156 ±38 |
| " | M/F 5-10 yrs | 157 ±27 |
| " | M/F 10-15 yrs | 172 ± 22 |
| Owen et al 1971[11] | M/F 1-2 yrs | 159 |
| " | M/F 2-6 yrs | 165 |
| Clarke et al 1970[54] | M/F 16-18 yrs | 166 ± 30 |
| Baker et al 1967[55] | M/F 10-13 yrs | 154 ± 32.5 |
| Schilling et al 1964[15] | M 16-20 yrs | 199 ± 3.6 |
| Friedman & Goldberg 1975[7] | M/F 2-4 mos breast fed | 146 ± 4.6 |
| " | M/F 12 mos breast fed | 145.8 ± 1.5 |
| " | M/F 18-24 mos breast fed | 155.8 ± 6.0 |
| " | M/F 2-4 mos formula fed | 123.8 ±8.3 |
| " | M/F 12 mos formula fed | 141.4 ± 1.6 |
| " | M/F 18-24 mos formula fed | 154.6 ± 4.5 |
| " | M 15-19 yrs | 156.2 ± 7.9 |
| " | F 15-19 yrs | 154.9 ± 5.7 |
| Glueck et al 1972[56] | M/F 12 mos | 129 |
| Rosanen et al 1977[57] | M 5-19 yrs | 234 |
| Leonard et al 1976[58] | M 2-13 yrs | 165.3 ± 38.6 |
| Hennekens et al 1976[12] | M/F 1-21 yrs (children of healthy men) | 176.6± 27.9 |
| " | M/F 1-21 yrs (children of men affected by M.I.) | 185.1 ±45 |
| Hodges and Krehl 1965[59] | M 14-19 yrs | 160 ±34 |
| Frerichs et al 1977[60] | M/F 5-14 yrs | 165.3 |
| " | M/F 5-14 yrs (blacks) | 170 |
| " | M/F 5-14 yrs (whites) | 162 |
| Friedman & Goldberg 1973[61] | M/F 9-19 yrs | 157 |
| Webber et al 1978[6] | M/F Cord blood | 70 |
| " | M/F 6 mos | 135 |
| " | M/F 12 mos | 145 |
| Friedman 1975[62] | M/F 0-5 yrs (Arizona) | 169 |
| " | M/F 0-5 yrs (Mexico) | 148 |

## High Density Lipoprotein (HDL) and Low Density Lipoprotein (LDL) Cholesterol as CHD Risk Variables

Until recently, most lipid studies of childhood and adolescence included total serum cholesterol and/or

triglycerides as a risk factor for CHD in later life. It is unknown, however, whether adult serum cholesterol levels can be predicted from serum lipid values in infancy and childhood.[18] It has now been determined that LDL is positively correlated with CHD risk. It thus appears plausible that total cholesterol may have incomplete value for CHD risk prediction and that future studies should differentiate between cholesterol fractions, i.e. HDL and LDL cholesterol. These fractions in childhood and adolescence may enhance or complement the predictive value of adult cholesterol and triglyceride levels as related to later CHD risk. This concept has been supported by recent studies in the U.S.A. and New Zealand.[19, 21]

It has also been shown that by measuring the concentration of beta or LDL rather than total cholesterol in cord blood, the diagnosis of hyperbetalipoproteinemia can be made more reliably in the newborn who has an affected parent.[22] Further research is required in order to determine the effect of environmental factors on HDL, LDL and total serum cholesterol early in life.

## Serum Cholesterol Binding Reserve (SCBR) Concept as Another CHD Risk Factor Determinant

It has been proposed that two serum lipoprotein subfractions separated from very low density and HDL have physiological roles in retarding atherogenesis by removing cholesterol from the arterial intima and transporting it back to the circulating serum.[23] Accordingly, individuals having low SCBR, being deficient in those subfractions, may be at higher CHD risk. This hypothesis was tested with patients having premature myocardial infarction.

SCBR was found to be significantly lower in M.I. patients than in controls.[23, 24] Further support for this hypothesis was provided by measuring SCBR in diabetic adults in comparison to nondiabetic normal controls of the same age range and sex. These results indicated that the SCBR of diabetic subjects was significantly lower (71.9 mg/dl) than the control subjects (88.9 mg/dl). The SCBR hypothesis as a predictor of future CHD merits testing in children.

Hypertension is a major risk factor associated with coronary heart disease in developed countries of the world. The risk is continuous, i.e. the greater the blood pressure, the greater the risk of the CHD event. Hypertension occurs in family aggregates, suggesting a genetic basis; perhaps up to 60% of the population variance may be attributed to genetic differences.[25] Environmental factors on the other hand may account for 10-15% of the total population variance. Many host and environmental factors are apparently responsible for striking differences in blood pressure prevalence patterns throughout the world. These differences are reflected in the widespread diversity of prevalence rates of hypertension and coronary heart disease among various peoples and in various countries. It is unclear when and how these host and environmental factors are combined to trigger or cause hypertension. It is still unknown what blood pressure level is normal for a given population in a specific geographic area. This is especially true for infants and children where normative blood pressure data has only recently been published for children two to 18 years of age but has not been established for younger children.[26]

## Blood Pressure and Salt Intake

The epidemiology of hypertension and the influence of salt intake, obesity, physiological and social stress has recently been reviewed.[27] It has been proposed that excess salt intake over a number of years may trigger the appearance of hypertension in genetically susceptible individuals. Dahl et al fed commercially prepared baby food to rats, most of which subsequently died of hypertension.[28] In addition to baby foods, infants ingest four times higher salt intakes when fed cows milk compared to breast milk. Children in developed countries of the world appear to be nutritionally exposed to a sodium-rich environment.

The average salt intake in the U.S.A. is estimated to be 10-12 g per day which is well above the human requirement of approximately 4 g daily. However, the relationship of salt intake to hypertension is not clear. Dahl's population studies indicate that the higher sodium intakes are associated with a greater prevalence of hypertension.[29, 30] On the other hand, experiments in adults with mild, untreated essential hypertension have shown that the administration of 6 g NaCL daily from two to nine weeks did not cause edema or significant changes in body weight or blood pressure.[31] However, only a moderate amount of salt was given for a short period of time during the course of this study. In a similar study of adults, large amounts of sodium were given (37 g NaCL above the usual salt intake) to normotensive adults, resulting in facial puffiness with progressive increase in blood pressure.

Epidemiologic observations suggest a relationship between salt ingestion and hypertension but fail to support the hypothesis that salt consumption is a major factor.[32] Indeed, there is no direct evidence to support the hypothesis that hypertension can be produced in a normotensive man ingesting the usual intake of salt.[31 33] On the other hand, the blood pressure of hypertensive individuals can be reduced by a diet that is low in salt.[34 35] Whether arterial hypertension develops from ingestion of a high-salt diet may depend on genetic predilections, time

of exposure and sociologic factors such as crowded living conditions and socioeconomic mobility.

Studies correlating the sodium intake in infancy to blood pressure have been recently initiated (Table 4). Such studies are difficult to conduct because many years of follow-up are required. A recent study demonstrated a significant association between the type of infant feeding and diastolic blood pressure.[36] The mean diastolic blood pressure was significantly lower in breast-fed babies compared to bottle-fed babies. The significantly higher blood pressure in the whole milk-fed babies was attributed to higher sodium content of cows milk vs human milk. The determination of blood pressure levels in infancy has been the focus of work by Levine et al who by the use of Doppler sphygmomanometry have found that infants who exhibit specific upper percentile of blood pressure levels at birth remain in the same "track" by the end of the first year.[37] It remains to be determined whether infants in the higher percentiles of blood pressure continue to follow the same percentiles in childhood and adolescence.

The studies of Zinner et al suggest that hypertension in adults could be predicted from blood pressure patterns in children and adolescents.[38] Zinner states that it is uncommon to find hypertension after the age of 30 in previously normotensive persons. This strongly suggests the origin of hypertension to be early in life. Although this may be due to genetic influences, early environmental factors may also contribute to hypertension. In a recent longitudinal study, adult blood pressure tracking correlations are reached by age 20, a finding which may have important implications for understanding the natural history of elevated blood pressure and perhaps for decisions concerning intervention.[39]

**Table 4. — Prevalence of Hypertension in Children**

| Author | Population | Age | Prevalence of Hypertension % |
|---|---|---|---|
| Masland et al (1956) [63] | 1,795 | 12-21 | 1.4 |
| Londe (1966) [64] | 1,473 | 4-15 | 2.3 |
| Kimura and Ota (1965)[65] | 2,728 (Japanese) | 0.19 | 0.6 (hypertensive)<br>9.2 (borderline) |
| Heyden et al (1969)[66] | 435 | 15.25 | 11.0 |
| Christakis et al (1968)[16] | 74 (obese) | 10-13 | 11.0 |
| | 556 (non-obese) | 10-13 | 2.5 |
| Johnson et al (1975)[67] | 168 (white males) | 15-29 | 19.0 |
| | 106 (black males) | 15-29 | 34.0 |
| Lauer et al (1976)[68] | 1,315 | 14-18 | 8.9 (systolic)<br>12.2 (diastolic) |
| de Castro et al (1976)[69] | 320 | 15-19 | 3.6 |
| kilkoyne et al (1974)[70] | 434 | 12-20 | 6.9 |
| Cretens (1977)[71] | 1,183 | college students | 5.4 systolic<br>1.9 diastolic |
| Cassimos et al (1977)[72] | 4,428 | 7-18 | 3.1 |
| Webber et al (1973)[73] | 457 | 15-19 | 5 |

Briefly summarizing, hypertension is a major risk factor associated with coronary heart disease in Western populations but not in Japan or the Bahamas.[40] Hypertension occurs in family aggregates, thus suggesting a genetic basis. Environmental factors, on the other hand, also play an important role. Sodium intake and obesity are also related to hypertension. Long-standing hypertension appears to alter arterial structure to increase peripheral resistance. Elevation of systolic or diastolic pressure or both promote atherogenesis and myocardial infarction.

## Nutritional Determinants of Obesity

There is a contemporary tendency of all age groups of both sexes to gain excessive weight. The mean birthweight doubling time is 3.8 months today compared to 5-6. months reported several years ago.[41] Bottle-fed infants double their birthweight much earlier compared to breast-fed infants. The reason appears to be that solid foods were introduced earlier to bottle-fed infants than to breast-fed infants. Bottle-fed infants may become overfed because the mother determines feeding termination by encouraging the infant to empty the bottle. On the other hand, breast-fed babies are more active, spend less time in bed, and receive more attention from their mothers. Early introduction of solid food having high caloric density may also contribute to obesity.

The prevalence of obesity, i.e. having a relative weight over 120%, was 16.7% in 300 infants studied in England.[42] In Sweden, obesity prevalence was 15-23%. In the U.S.A. 14% of preschool children had excessive weight, defined as over the 85% percentile for weight on the Iowa Growth Chart. It is estimated that there are 10 million obese adolescents in the U.S.A.[43]

The above-cited prevalence of obesity is based on different methods used by the investigators in defining obesity. There is indeed a problem defining the degree of fatness which can be called obesity. Children exceeding two standard deviations in weight can be considered overweight but may not be obese. However, an infant whose weight is in excess of three standard deviations, and whose length is not proportionately increased, is much more likely to be obese.

Among seven countries studied, the island of Crete in Greece has been found to have the lowest prevalence of CHD.[44 45] Cretan men, aged 40-65 years, were found to

weigh 7 kg less than a comparative group of age-matched New York City residents. Although the incidence of CHD continues to be low in the adult cohort, the prevalence of elevated CHD risk factors such as obesity, appears to be increased in the current generation of Cretan men.[46] In a recent study of 268 children aged 13 to 15 months in Crete (county C), the prevalence of obesity was investigated in relation to two other counties (A and B) having intermediate and high infant mortality compared to Greece's mean infant mortality rate. (Table 5). These data indicate that the county with the lowest infant mortality rate (county C) and the highest socioeconomic level, also has the highest prevalence of obesity (31% of the children over 110% relative weight) compared to the lower socioeconomic areas (counties A and B — 10% in county A and 25% in county B with relative weight over 110%).[47]

Overweight or obese infants have a greater frequency of illness, specifically respiratory infections. Although these obese children have increased morbidity, there is no evidence that mortality is higher. The long-term problem is that obesity in the first six months of life may have a high predictive rate for childhood obesity.

Dr. Donald B. Cheek's statement merits quoting: "the fetus exists before the infant and the mother before the fetus." How may maternal nutritional status have a direct impact on the nutritional determinants of chronic disease in the fetus?

1. The weight of the mother, before and during pregnancy, is related to the size of the newborn. The more weight gained, the larger the fetus and the newborn; however, birthweight is not correlated with later overweight or obesity.

2. Mother of excess-weight infants are older, have greater parity, are taller and heavier.

3. Mothers who give birth to smaller babies have a greater prevalence of smoking and hypertension.

4. The nutritional patterns of the mother provide the substrate from which the fetus cell number and size are partially determined. Some pregnant women, especially teenagers, have low protein and iron intake before and during their pregnancies. On the other hand, an intake or excessive saturated fats and refined carbohydrates will result in weight gain, contributed by foods of low nutrient density. Such a diet may predispose to fetal hypercholesterolemia and hypertriglyceridemia as well as result in a newborn with more and/or larger fat cells. A related question emerges — what influence does maternal diet pattern have on the infant's? Is the infant "conditioned" to certain nutritional patterns by the diet of the mother?

5. Amino acid imbalance contributes to growth retardation. In postnatal life, growth hormone increases nuclear number in metabolically active protoplasm while insulin is involved in cytoplasmic growth. Thus factors which control synthesis of these hormones control growth. At term, adrenal enlargement occurs resulting in increased glycogen storage. Since the many steroid hormones elaborated by the adrenal may require adequate vitamin C for synthesis and/or release, overall nutritional status is patently important.

**Table 5. — Relationship of Infant Mortality to Prevalence of Obesity.**

| Counties Having Different Infant Mortality Rates | n | Excessive Relative Weight (110-120%) % | Obesity (over 120%) % |
|---|---|---|---|
| A. 63/1000 | 101 | 7 | 3 |
| B. 32/1000 | 108 | 19 | 6 |
| C. 13/1000 | 268 | 24 | 7 |
| Total | 477 | 19 | 6 |

## Conclusion

Chronic diseases such as coronary heart disease, hypertension, obesity, diabetes and cancer appear to exhibit a long latent incubation period and metabolic pathogenesis. Atherosclerosis may have precursors early in life and may progress at a variable rate dependent upon many genetic and environmental factors. Fatty streaks appear in the endothelium of the aorta in infancy; they may remain unchanged, disappear or ultimately develop into fibrous streaks which may progress to atherosclerotic plaque. In populations having a high prevalence of CHD, fibrous plaques appear in the aorta during adolescence.[48 49] These lesions contain more lipid, more inflammatory cells and more extracellular lipid and necrotic debris than did lesions in adolescents from populations with less severe atherosclerosis.[50] Recent studies demonstrate definite regression of the atherosclerotic lesions of the arteries after relatively brief periods of nutritional intervention.[51] Such findings have been confirmed by experiments in primates; they provide unequivocal evidence that plaque regression could occur as a result of a low saturated fat and low cholesterol diet.

Should a "Prudent Diet" be initiated in school-age children in an effort to prevent premature cardiovascular disease? Should a lowered salt intake be recommended? Should not regular physical activity be part of school and home life? Arterial blood pressure measurements should be part of the pediatric clinical examination as hypertension has its roots in childhood and adolescence. The Prudent Diet and antismoking attitudes in childhood may also tend to pervent lung and colon cancer.

Finally, breast feeding and late introduction of solid foods appears to be the most appropriate nutritional pattern in infancy which may prevent the later onset of obesity and hypertension.

References are available from the authors upon request.

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# Feeding Children

## I. Infant Nutrition

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Nutrition remains a cornerstone in the wellbeing of infants for the first years. Many believe that early nutrition and establishment of good feeding practices may influence the later development of the child, even to the extent of affecting the onset of degenerative diseases in later life. All those providing medical care for children can and should provide information to parents regarding present understanding of infant nutrition in the hope that some illnesses in children may be lessened and the goals of prolonged better health attained.

For the past several decades infant feeding practices have been largely directed by parents who have occasionally based these practices on unsound information. While in most instances such happenstance practices have resulted in infants who thrive, some instances of illness could have been prevented had more careful practices been instituted early in life. The large majority of infants are resilient and can correct minor errors in nutrition. For the 5% or 10% of infants who are more subject to illness, early aids may avoid the illnesses.

### Breast Feeding?

For eons it was recognized that newborn infants lived only when fed breast milk. With technical advances in artificial formula making and adequate refrigeration, over the last 30 or 40 years it was widely believed that infants thrived equally well when nourished with breast milk or simulated human milk formulas. Even the most recent studies comparing breast and bottle-fed infants indicate that in a highly developed area, Cooperstown, New York, breast-fed infants have a significantly lower morbidity than those fed simulated human milk formulas.[1]

Among the advantages of breast milk are the following:

Breast milk is less likely to be associated with allergic manifestations in infants. It has been suggested that the lower level of casein and the unique qualities of human lactalbumin are responsible for the lower allergenicity compared with cow's milk or soybean protein.[2]

Iron in breast milk is readily absorbed; that in cow's milk formulas is less easily absorbed.[3] Evidence has been presented to indicate that even though breast milk contains little iron, breast-fed infants not supplemented with iron-containing foods are unlikely to become iron-deficient or anemic. Bottle-fed infants must receive iron supplementation to prevent anemia not only because nonhuman milks contain little iron but also because excessive ingestion of unmodified cow's milk may cause gastrointestinal bleeding.

Zinc and perhaps other trace minerals are also more readily available from breast milk than other milks.[4] Infants with acrodermatitis enteropathica, a severe and often fatal diarrheal disease, frequently survived when fed breast milk but not other milks. Initially this was attributed to the essential fatty acid content of breast milk. Subsequently, it was recognized that this condition was associated with zinc deficiency secondary to poor absorption of zinc in formula-fed infants; zinc absorption was found to be facilitated in breast-fed infants, accounting for their survival.

Breast-fed infants have increased resistance to gastrointestinal and respiratory infections. This is and probably will remain for some time the least likely to be duplicated property of formulas. Specific antibodies which effectively suppress viruses and bacteria in the intestinal tract, e.g. IgA, nonspecific factors such as lysosyme and lactoferrin, as well as human macrophages in human milk which grow in the intestinal tract help improve resistance to infections. Artificial or synthetic sources of these substances do not seem to be on the horizon.[5]

Cretinism may be mitigated by breast feeding, perhaps because of significant thyroid hormones in milk.[6] Low birth weight infants also seem to benefit from fresh breast milk. The better response of low birth weight or prematurely born infants has been attributed to the

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presence of specific antibodies, the unique characteristics of the protein and fat, or the lower osmolality of human milk.

Less certain advantages of breast feeding have been suggested. Emotional attachment of the infant and parents can be equal whether the infant is bottle or breast fed. Obesity seems less frequent in breast-fed infants but can occur. Calcium absorption, which is poor when cow's milk is fed, is corrected by presently available formulas. The protein content in formulas is lowered to approach that of human milk and the carbohydrate is limited to lactose which produces an acid milieu in the intestine. Scurvy and rickets which are rare in the breast-fed infant[7] are eliminated in the simulated human milk formula-fed infants since these contain added vitamins C and D.

## What Can the Doctor Do?

The most positive influence in the encouragement of breast feeding is in the hands and thoughts initially of the obstetrician. The most negative influences have been found to be discouragement by the obstetrician or the nursery nurses. Many pediatricians also have not encouraged nursing, and this negative or neutral feeling has been transmitted to mothers. Encouragement by the pediatrician, husband, grandmother, and others helps, even though many of these may have been bottle fed.

The recent increase in the number of nursing mothers compared to the last two decades indicates that society is ready to accept nursing after a 20 year decline. First started in the middle and upper classes, nursing has been accepted by the activist groups, and more recently by some of the lower socioeconomic families. Nursing mothers may have problems which differ from those of bottle-feeding mothers. Encouragement and support by the obstetrician, nurses, and physicians caring for the children are necessary. Convincing mothers with fissured nipples or breast abcesses to continue nursing is difficult, but suitable shields or antibiotics can help. Explanation of the benefits of nursing to the baby frequently overcomes the mother's doubts.

Some mothers will not nurse. Social, psychological, economic, and health reasons may prevent nursing. Such mothers should be advised to use a formula which closely simulates human milk, in which the protein and electrolyte contents are lowered, where the saturated fat has been replaced with polyunsaturated fats, and where the formula is supplemented with iron and vitamins.

Breast feeding or formula feeding continues until the baby conveniently drinks from a cup and eats a varied diet, ususally at 9-12 months of age.

## Solid Feedings

The time for introducing solid feedings has been clouded by social, sociological, and developmental considerations. Early introduction of solid feedings has no known nutritional basis for infants fed human milk. Human milk apparently contains sufficient nutrients as a sole food until nine to 12 months of age. Cow's milk or formulas may not be complete foods; for example, zinc, iron and vitamin D supplementation are needed. Other deficiencies may be found but, as stated by the Committee on Nutrition of the American Academy of Pediatrics in 1958, there are no known advantages to introducing solid feedings before 3-4 months of age or even later in the breast-fed.

There are recognized harmful effects of early introduction of solid foods. The more foods introduced in the first six months of life, the more likely the development of food and other allergies either in the infant or later.[8] Many of the home prepared foods and some of the commercial foods may contain excessive quantities of salt. Some evidence in animals indicates that early introduction of high salt foods is related to later hypertension. Feeding an infant who cannot support himself properly in a sitting position is difficult and frequently results in an unnecessary battle. Obesity in infancy can be harmful to the infant himself even if later obesity is avoided. Obese infants, it has long been recognized, combat respiratory infections much less well than lean ones.

Doctors must convince parents that there are no known advantages to early introduction of solid feedings and some undesirable effects. Solid feedings may begin at 3-6 months of age and should be with single foods. Rice cereal can be started at 3-6 months, followed by single fruits such as apple, pears, peaches at 4-7 months, vegetables such as peas, beans, carrots at 5-8 months, meats such as beef, lamb, liver at 6-9 months, egg yolk at 7-10 months, and then finger foods or junior foods. No new food should be introduced more frequently than one each week. Such a regimen should decrease the incidence of infantile diarrhea as well as food allergies.

## Colic

Colic is a poorly defined syndrome in which the baby, two weeks to two months of age, seems to have abdominal pain, draws his legs up, becomes distended, and may pass flatus. Crying decreases usually when the baby is given more attention. The syndrome disappears spontaneously at about three months of age.

Causes of this syndrome are largely unknown. Of the known nutritional causes that produce such irritable infants, the most common is overfeeding and the next most common is underfeeding. Therefore, it behooves the physician first to get an accurate dietary feeding history. Too frequent or too sparse feedings also may contribute. Food intolerance may be a cause of colic but changing the diet should not be tried until other causes are eliminated.

### Diarrhea

Diarrhea is the presence of loose, watery stools. Infants normally may have as few as one stool every three days up to eight stools daily. Frequent stools can be normal and do not indicate diarrhea.

Diarrhea can have multiple causes. In infancy the most common cause is overfeeding, but underfeeding, viral or bacterial gastroenteritis, food intolerance of multiple etiologies, irritable colon, cystic fibrosis of the pancreas, neural tumors and others may cause diarrhea.

In the treatment of diarrhea, the infant's hydration must be maintained. If diarrhea is severe, parenteral fluids are required.

In mild diarrhea or in realimentation after diarrhea has lessened, clear fluids should be given followed by slow reintroduction of the previous diet. After the onset of diarrhea, lactase disappears from the brush border of the intestine making the infant temporarily intolerant to lactose and the intestine wall becomes more permeable to protein. Many with food allergy can date the onset of the allergy to an episode of diarrhea. Therefore, a varied diet should not be reinstituted until several days after the diarrhea has ceased.

### Juices

The purpose of fruit juice in the infant diet is simply to vary the diet. Fruit juices contain vitamin C but this is available from other sources. Fruit juice, even natural fruit juice, has a caloric density almost equal to that of milk or formula, and these calories are mainly composed of carbohydrate. Therefore, early introduction of jucie may displace other needed calories.

Bottles containing formula or juices should not be used as pacifiers. The practice of feeding fruit juice through a nipple and bottle is bad, as they may be used as a pacifier which keeps a high carbohydrate mixture nearing the budding teeth and contributes to "milk-bottle caries."

### Caries

Two factors have helped reduce the incidence of caries. In areas where the water supply is fluoridated, caries is decreased. If the water supply is not fluoridated, infants should be given fluoride drops to contain about 0.25 mg. daily.

Parents should be warned about milk-bottle caries. When the bottle containing milk or sweetened liquids is kept in the mouth for long periods, development of caries is encouraged. Pacifiers or bottles containing only water should be used for those infants who have extra need for sucking. Weaning from bottle or breast can be accomplished at 9-12 months. Unsweetened water should be given to satisfy thirst.

### Skim Milk

Concerns about obesity and saturated fatty acids have led some to recommend skim milk in the diets of infants. This can be dangerous, especially in infants less than a year of age.

Obese infants should not be made to reduce, but to limit the rate of gain. This is a more satisfactory and less potentially harmful method of producing a more desirable physiognomy. This can be accomplished by decreasing the caloric density of nutritionally good foods. If one ounce of water is added to 4 ounces of complete formula, the caloric density is equal to that of 2% skim milk, and generally satisfies the hunger of an infant at this lower caloric intake. Water can be given between feedings or mixed with solid feedings.

In contrast, skim milk has produced a high osmolar load for the infant and satisfies neither thirst nor appetite. Therefore, infants can drink large quantities of this fluid consuming a high electrolyte high protein unbalanced diet. The danger of developing hyperelectrolytemia with subsequent ill effects such as diarrhea or brain damage is real. Dangers are lessened with 2% milk, but use of this is also unnecessary. After the age of a year or two, if the diet is sufficiently varied and the child does consume large quantities, skim milk may be safe. Skim milk should not be used for realimentation following diarrhea.

One proposed purpose for the early introduction of skim milk in the infant diet is to lower the saturated fat in the diet. Both human milk and simulated human milk formulas contain considerable polyunsaturated fat. Furthermore, in reviewing the use of fats in those with hyperlipoproteinemia, the Committee on Nutrition of the Academy of Pediatrics found no good reason to limit type or quantity of fat at such an early age even in high-risk infants. As information accumulates, it may be found that low saturated fat intakes are desirable for the older child, but as yet no good information warrants such a recommendation.

### Milk Intake

During the first year of life, infants require 100-120 kcal/kg/day. Milk supplies about 67 kcal/dl or 670 kcal/liter or quart, sufficient for about a 7 kg or 15 pound infant. This is usually the maximum recommended intake of breast milk or formula, and additional calories are supplied by other foods. Thus at one year a 10 kg (21 pound) infant gets about two thirds of his calories from breast milk or formula. When the infant is weaned to whole milk, a more varied diet is desirable. This can be accomplished by limiting cow's milk to 500 ml (1 pint) a day. Such infants and children will then seek more varied sources of calories, some of which will contain iron.

### Conclusion

All who care for infants can help prevent diseases of infancy by recommending good nutritional practices. Most important is the recommendation by obstetricians, nurses, pediatricians and other primary care physicians that breast feeding be utilized for 9-12 months. If the mother will not or cannot nurse, those formulas which most nearly simulate human milk with added vitamins and iron should be utilized.

Solid feedings should not be offered until 3-6 months of age, and should be introduced singly. Overfeeding and underfeeding should be avoided. If diarrhea develops, solid feedings should be reintroduced singly.

Juices are largely carbohydrate, should not be given early, and preferably should not be given by a bottle. No carbohydrate containing solution, including juices or formula, should be used as a pacifier. The infant should be given his feeding and the bottle removed from the mouth to prevent bottle caries.

In areas where the water supply is not fluoridated, the infant should be given fluoride drops.

Skim milk is dangerous if used as a major nutrient in the first year of life because it provides an unbalanced diet with a high protein and high electrolyte load. Other nutrients can accomplish better the desired effects of skim milk.

After weaning, which should occur at 9-12 months, whole cow's milk intake limited to one pint daily (500 ml) encourages the infant to consume a varied and balanced diet.

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# II. After the First Year

### Intake

During the first year infants usually consume most foods offered them and appear to have an unlimited appetite. Beginning with the second year, appetite decreases and may remain low until about four to seven years. Decreased appetite parallels the physiological decrease in growth rate. Parents should be reassured that the child will not suffer ill effects from the markedly lower intake. They should continue to offer varied foods but not force the child to eat. Forced feeding at this age can lead to psychological problems as well as to obesity and other errors of overfeeding. Growth charts can be utilized to show the parents the benignity of the decreased intake.

### Variety of Foods

During the first year of life, when the diet consists largely of human milk or simulated human milk with added vitamins, all known nutrients are consumed in reasonable amounts. After weaning, varying the sources of foods also provides all known nutrients. Selections of foods should be made from different food groups. The "basic four" is an easy-to-remember and simplified grouping of foods. The "four" consist of (1) meat, fish, poultry, eggs, (2) dairy products: milk, cheese and similar products, (3) fruits and vegetables, (4) cereal grains, potatoes, rice. In the past, selection from these groups provided a generally satisfactory diet. In recent years the widespread use of fast foods or artificially reconstituted foods has suggested to many that more complex divisions of food groups is necessary, at least to separating fruits from vegetables, and making a separate category for fats and oils. Any grouping which is satisfactory to the physician and family should lead to a varied diet for the growing child.

Limiting caloric intake of each of these groups to no more than 1/3 the total daily caloric intake generally provides the balance needed to supply all nutrients. This requires limiting whole milk ingestion to about one pint a day (or three glasses of skim milk) from one to six years, about three glasses from six to ten years, and a maximum of about one quart thereafter. Adequate fluid intake should be maintained by more liberal use of water. Other beverages which contain sugar are best relegated to occasional use.

Some children after weaning are unable to digest lactose. If gastrointestinal symptoms develop after drinking milk, they should not be urged to drink any milk.

High quality protein can be obtained from multiple vegetable and animal sources and vitamins, calcium and other minerals from other sources. Fish, nuts, and legumes are good sources of calcium and the colored vegetables offer ready sources of most vitamins.

Concern about high fat intake has suggested to some that no good has been shown to accrue from the high fat intake of the present American diet. If concerned, utilizing skim milk instead of whole milk and limiting egg ingestion to four per week has been suggested as a reasonable step to the "prudent diet" after the first year. Limiting salt intake may similarly be beneficial and is discussed elsewhere in this issue.[9]

A suitable variety can be obtained by selecting from:

Breakfast — cereal, milk, bread, cheese or other protein source

Mid-morning — fruit or fruit juice

Lunch — Meat, colored vegetables, fruit, peanut butter

Mid-afternoon — fruit or juice

Dinner — meat, fish, egg, vegetable, fruit or milk

Bedtime — milk or "snack"

### Supplemental Vitamins

Those children who are eating a varied diet need no supplemental vitamins. In various surveys in this country little evidence was found for any vitamin deficiency and where found the incidence did not differ in those populations given or not given vitamin supplements. The use of supplemental vitamins "as a tonic" or for children with no appetite is likely to foster bad habits including the habit of taking pills to solve problems.

### Supplemental Fluoride

If the drinking water is fluoridated, no fluoride supplements should be used. In nonfluoridated areas, supplemental fluoride has been found to lower the incidence of caries. Recommended dosage is presented in the articles on dental nutrition.[10,11]

### Vegetarianism

A vegan is one who eats no animal products. A vegetarian is one who eats eggs or dairy products but does not eat animal flesh. All necessary nutrients are obtainable in a vegetarian diet, but must be varied. For example, proteins of individual vegetables may have low biological value but when mixed with different vegetable proteins the combination has a higher biological value than either of the proteins alone. This may be due, in part, to the combination having a complementary effect on the essential amino acid mix. For example, a grain-legume combination provides much better nutrition than either grains or legumes alone.

Vitamin $B_{12}$ is present almost entirely in foods of animal origin. Therefore, the diet of the vegan is Vitamin $B_{12}$ deficient. The other B vitamins are present in whole grain cereals and in leafy vegetables. Calcium obtained largely from dairy products is also obtainable from fish, nuts, and legumes. The high fiber of vegetables usually causes bulkier bowel movements. Absorption of zinc, chromium, and other trace minerals may be decreased in those eating high fiber diets. Consumption of foods with indigestible fibers may lower cholesterol absorption and may have an effect in preventing later gastrointestinal diseases.

If the diet is selected as a fad, short periods are probably harmless. However, prolonged restricted diets whether of animal or vegetable origin are likely to be associated with the development of deficiencies.

### Adolescent Nutrition

Adolescence is marked by accelerated growth. Undernutrition slows growth and overnutrition can speed it up. Caloric intake must be increased to provide normal growth. Ranges of increased requirements of calories, composition of calories, and minerals and vitamins are outlined in Recommended Daily Allowances.

With a varied diet, the requirements of macro and micronutrients are usually met when the caloric requirements are met. If, however, a large proportion of the calories are obtained from a single food or single group of foods, deficiencies may develop. Refined sugar has received attention as supplying carbohydrate calories without any other nutrients, so-called "empty calories." The dietary need of 40-60% of the calories as carbohydrate can be partially met by sugar as well as by more complex carbohydrates. Sticky sugars or frequent ingestion of sugar especially in confections are factors in the development of caries. Complex carbohydrates may be less atherogenic than simple carbohydrates, but data is not conclusive. The active person, including the athlete, requires calories to maintain energy, and for these supplemental carbohydrates as simple or complex sugars may be convenient, rapidly utilizable sources. However, simple sugars should be limited in total amount so that calories are obtained from multiple sources.

The diet of the pregnant adolescent girl is of special concern. During the active growth period, caloric intake adequate for growth is necessary. The adolescent who becomes pregnant has usually passed her maximum growth period, since menses and ovulation follow this period. If prepregnancy nutrition has been good, recommendations for good nutrition are similar to those for any other pregnant woman.[12] The development of good eating habits is essential before the child becomes pregnant to insure a good outcome of the pregnancy.

## Athlete Nutrition

Like all others, child or adolescent, the athlete benefits from a varied diet. Vitamins, minerals, proteins and other supplements are unnecessary and may be harmful. Adequate caloric intake is necessary both for growth and for the increased demands of activity. Children who do not perform well may have limited diets because of expense, lack of sufficient time to eat or because of poor habits.

Short energy spurts utilize stored ATP and phosphocreatine. Prolonged energy expenditure utilizes muscle glycogen anaerobically. Glycogen loading is possible by limiting carbohydrates during training, followed by high carbohydrate intake several days before the competitive event.

Food intake should be regular in pleasant surroundings. Water should be scheduled before and during athletic events. With regular meals and adequate water intake, no electrolyte solution is necessary.

For regular meals, the menu should include familiar foods and should be sufficient to prevent hunger and feelings of weakness. The timing should be such that the stomach is empty at game time. A good pregame meal is high in carbohydrate, low in fat, with abundant liquid and restricted in bulk and salty foods.

Athletes should be informed that exercise tolerance is diminished by smoking or drugs.

Prolonged exercise has been found to be associated with decreasing hemoglobin levels. The precise mechanism is unknown but appears related to an increased blood volume and change in body composition. Hemoglobin levels should be determined periodically and if low, ferrous sulfate should be given.

## Obesity

Multiple factors have been implicated in causing later obesity. Overfeeding, early introduction of solid foods to the infant, infantile obesity, increased fat cell numbers, heredity, psychosocial factors and others have been suggested for causing obesity but it is difficult to document any one cause of late and persistent obesity. Increasing activity, consistent periods of exercise, decreased television watching and active lifestyles seem to be associated with less obesity and better self image than any dietary or other forms of behavior modification, but no extensive series on any regimen is available. Preservation of mental well-being and avoidance of creating a sense of guilt is essential in any dietary manipulation, especially for treatment of obesity.

## Conclusions

For the child after one year of age, decreased intake may cause concern. If the selection of foods is broad and if caloric consumption maintains weight so that normal growth patterns are attained, fears are groundless. Forced feeding at this age helps develop poor eating habits and may be a factor in later obesity. Fluoride supplements are necessary for the first ten or 12 years of life, but vitamin supplements are unnecessary and may be undesirable.

Vegetarian diets can supply all nutrients providing foods are selected from all food groups. Vegetarian diets have higher fiber content which may be advantageous. Fad diets are not harmful if consumed for short periods, or if selection is not restricted.

Athletes should be reminded that they need sufficient calories and adequate water. Sufficient exercise is prophylaxis against obesity.

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# The School Lunch Program
# Its Past, Its Problems, Its Promise

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Almost 1 million Florida students (K-12) participated in the school lunch program on the average day of the 1977-1978 school year. How well did these children fare nutritionally and how much did they learn about food and nutrition? This paper will examine these questions while looking into the history of the program, its problems and changing purposes, and its future.

### History

The National School Lunch Act became law in 1946 having evolved from efforts which began almost 100 years earlier. Three main forces were involved in development of the program which led to the law.

One of these was the concern that many children were too hungry and nutritionally deficient to perform at their optimal levels. The first school lunch program in this country dates back to 1853 when The Children's Aid Society of New York City opened the first of its vocational schools to the poor and served free meals to all who attended. Forty one years later The Starr Center Association provided penny lunches at several Philadelphia schools.

Shortly after the turn of the century Robert Hunter in his book "Poverty" and John Spago in "The Bitter Cry of the Children" focused the spotlight of public attention on widespread poverty in children and its effect on their ability to succeed. It was pointed out that in Europe the problem had been attacked through school feeding programs. By 1913 there were school lunch programs in 30 cities in 14 states. Soon afterward the National Congress of Parents and Teachers began to push for and assist in school lunch programs.

A second factor leading to the passage of the National School Lunch Act was a surplus of commodities. In the years following the stock market crash of 1929, a huge agricultural surplus developed in a country with millions of hungry children. In 1935 Congress passed Public Law 320 which initiated purchase and distribution of excess commodity foods to school lunch programs. With this law the Department of Agriculture became the overseer of the program, a position it still occupies. A third major push was massive unemployment also related to the depression. In 1935 the Works Progress Administration (WPA) was formed and among other things provided labor and trained supervisory personnel for school lunch programs.

From these beginnings the program has continued to grow. During World War II high unemployment rates dropped and commodity excess all but disappeared but federal support for school lunch continued. Lewis B. Hershey, Director of Selective Service, estimated that 155,000 war casualties were related to malnutrition. Surgeon General Thomas Parran pointed to the National School Lunch Act as one of the most important health laws of our time. With testimony of this sort the Congress was spurred to act and in 1944 $50 million was provided for milk and lunch reimbursement. By 1947 all states had programs under the national act. State financial support has followed.

School lunch is big business. It's the second largest away-from-home food market: $7.8 billion is spent annually of which 30% is federal funding; 25 million children are served daily and over 4 billion meals are consumed annually; 30-40% of these meals are free or at a reduced price.

### Problems and Changing Purposes

Like many programs which have evolved to solve a variety of problems, there is still a question as to primary purpose. Is it to feed hungry children? The nutritive impact of school lunches unfortunately has never been systematically measured but studies in developing countries have shown benefit in terms of school performance. The Iowa Breakfast Studies showed similar results. Or is the program purpose to teach nutrition, to help consume excess commodities, or provide a place for employment of the unemployed? Should the program still be under the direction of the Department of Agriculture or should direction come from an agency whose emphasis is more directly on health and education? Other concerns are plate waste, low attendance, lunchroom atmosphere and logistics, the commodity food program and the provision of adequate nutrients.

## Plate Waste

A major concern of food service professionals is getting students to use school cafeterias and to eat the food they are served. The latter problem commonly referred to as plate waste has become a political, parent and taxpayer issue. It has been estimated that $400 million of food is dumped into school garbage cans each year. CBS's popular "Sixty Minutes" devoted an hour to the issue and school food service journals are filled with related articles.

There are many ways of looking at plate waste. Maybe it is partly a reflection of an affluent society which also has high rates of restaurant and home plate waste. Some of it is related to the fact that with standard portion sizes aimed at the average child's appetite too much food is given to some and too little to others. If food preparation is such that food looks or tastes unappetizing wastage will increase. Quality ingredients prepared and served with an eye to color, texture, taste and avoidance of monotony will lead to conservation of nutrients.

## Tastes Change

When burritos were first tried in Tampa four years ago they were largely thrown away. Since then a taco quick service restaurant moved into town and began advertising and now tacos are among the most popular menu items in nearby schools and burritos are back on the menu. Ethnic background and family social habits and customs are also related to food acceptance. Introducing new foods to students has long been an aim of many but experienced school lunch managers know to reduce portion size for unfamiliar foods. Genetic differences are also important when such things as lactose intolerance of many children, especially blacks, is considered.

More and more schools now have student advisors involved in meal planning. In Florida, school Youth Advisory Councils (YAC) are organized and meet on a statewide basis as well as in their own schools. Some schools have had children rate student acceptance of foods on the basis of matching their feeling about what they have just eaten or drunk with a variety of faces (Fig. 1).

Children's tastes and choices of food are often different from adults. Some foods present unusual problems. Most adults like apples and consider them healthful enough to keep the doctor away if taken daily. Younger children who are missing front teeth and adolescents in braces may shun them. When sliced to reduce portion size they turn brown and unappealing. Cafeteria managers don't like them because they are so often used as missiles and at least one school banned them because they plug up commodes.

Studies on plate waste are occurring in many places in efforts to reduce the problem. It is agreed that wastage should be measured at each school as a guide to changing preferences, appropriate portion size and reaction to monotony. A study in Leon County, Florida, has shown that plate waste decreases each year from kindergarten through grade 5. It has confirmed studies done elsewhere that plate waste is not the same for all menu items. Most wasted are vegetables followed by fruits and then in descending order dessert, entree, bread and milk. Girls tend to throw more food in the garbage than boys. A study of high school seniors in Hawaii showed that 42% of

Fig. 1

Grade Boy Girl

Mark the face that shows how you feel about this food.

FOOD

Great Good So-So Bad Awful

girls ate no vegetablies, 45% no fruit, 10% no meat and 10% no milk. The corresponding percentages for boys were 22, 24, 27 and 3. The Leon County study also showed that allowing choice of salad dressing in older children tended to increase acceptance. The issue of plate waste will continue to be with us and demands further study and evaluation as increasing emphasis is placed on acceptance, nutrition and cost.

### Lunchroom Atmosphere and Logistics

The logistics of serving lots of meals to lots of kids in a short period of time can be mind boggling. A well run cafeteria can serve 10-12 students per minute when all students are served the same items. If students are allowed choices the rate may slow to 6-7 students per line per minute. State guidelines for newer construction call for lunchroom capacity to seat approximately one third the student population at a time. Older schools and overpopulated schools may fall well short of this goal.

An example might help illustrate some of the logistical problems. A senior high school meeting state guidelines would be expected to have 700 cafeteria seats if the student body totaled 2,100. Most schools this size would have four serving lines. If each of these lines averaged 11 students served per minute it would take almost 16 minutes to serve 700 students. If food choices were offered it might take 27 minutes. Thirty minutes of release time for lunch are allowed in most Florida counties. According to my calculations 30 minutes would allow the last students through the line between 3 or 14 minutes to eat depending on whether or not a choice is offered. This is well short of the state guideline suggesting a minimum of 20 minutes eating time for each child. If the child is asked to put away his tray, makes a bathroom stop, or has his next class far from the cafeteria, he is in trouble. There is considerable variation in lunchroom scheduling related to such factors as double sessions and bus schedules which in Pinellas County bring some students to school as early as 7:15 and others as late as 10:00 a.m.

Many students choose not to use the cafeteria. For some, open campuses where they can leave to eat provides an answer. For others, snack bars and vending machines, often placed for fund raising projects, provide an out. Others gobble their food or go hungry. Answers are not easily found. Increasing cafeteria seating is expensive as is increasing labor and the number of serving lines. Extending the lunch break or serving smaller groups over a longer period does not enthuse most principals. Convincing more principals of the importance of the program could lead to major improvements in scheduling, atmosphere, nutrient consumption, and nutrition education.

Vending machines have been blamed by some as a major cause of low attendance in cafeterias and seen by others as a way to lure the students in. A bill to ban vending machines in the schools was introduced in the last Florida legislature. Using the machines to dispense fruit juice or so called "nutritious snacks" is advocated by others. There are proponents who would put machines in cafeterias to lure students in and others who would use them to dispense meals which could be heated. This emotionally charged issue is far from resolved.

### Commodity Foods

Commodity foods, one of the early factors leading to establishment of the school lunch program, have become a problem. Variation in what is available month to month and year to year has led to problems in long range menu planning. A trip to a school food service warehouse may reveal large quantities of such things as cranberries and soy beans. To consume these will require quite a bit of ingenuity on the part of the meal planners. Smaller schools especially have trouble incorporating into their plans commodities which are not shelf stable. Recently contracts for processing commodities into shelf-stable ready to eat foods have been hailed as a major innovation. Despite this there are many who feel it is time to sever the close relationship with the commodities program and instead effect cash savings through combined regional or large area bidding and purchase of foods.

In Florida Food and Nutrition and Management is in the Department of Education and the Commodity Food Program in the Department of Agriculture. This makes for less than optimal coordination of effort. Nationally there is consideration to remove the School Lunch Program from auspices of the Department of Agriculture and place it under the direction of the Department of Health, Education and Welfare. This makes sense.

### Type A Lunch Pattern

In an effort to meet nutritional needs of children it was decided from the program's beginning to try and provide students with one third their daily nutritional requirements at the luncheon meal. To standardize planning and serving, the needs of a child age 10-12, based on the 1968 Daily Dietary Allowances, were chosen as the basis for estimation of portion size. This created problems for the younger child who ended with more on his plate than he needed, for the girls who had lower requirements than boys, and for the older children who needed more. This problem was partially rectified with changes in figuring the 1974 RDA to include nine age-sex groupings. These have been reduced in school lunch figuring to five groups. Not addressed was the fact that for many low income families the school meal might

be the main meal of the day. It also did not consider the problem of the overweight child who would be better with a smaller than average serving.

The Type A Lunch (Table 1) until recently included five food groups which must be served with each lunch. There is also funding for Type B and C lunches but these lunches are seldom used. The early menu requirements were later modified to include iron and vitamin A and more recently the butter/margarine requirement has been dropped. Milk was originally acceptable only in its whole form until pressure was applied to allow flavored milk and later skim milk. Fat which earlier was to account for 40% of the calories is now set to provide 35%.

### Table 1

**Type A Lunch: 5 groups**

1. Milk - at least ½ pint
2. Meat or fish or eggs or cheese or dry beans or dry peas or soybeans or peanut butter
3. Vegetable and/or fruit
4. Whole grain or enriched bread or cereal
5. Butter or fortified margarine - no longer mandatory

**Type B Lunch**

1. Milk as above
2. Half portions of other groups

**Type C Lunch**

1. ½ pint of milk

### Table 2

| COST PRICE STRUCTURE: | TYPE A LUNCH |
|---|---|
| Cost per lunch 1978 | $ .90 |
| Estimated 1979 | 1.00 |
| Charge to student | |
| Full pay elementary | $ .50 |
| Full pay middle/high | .60 |
| Reduced price lunch | .20 |
| Federal support | |
| All lunches | $ .1525 |
| Free lunch (.1325+) | .6825 |
| Reduced price lunch (.1525) | .5825 |
| Commodity food support | .15 |
| Florida state funding | |
| For free and reduced price lunch only | $ .019 |

Until 1975 teenagers were being given all five food groups to meet the requirement for federal reimbursement. Many of them had no intention of eating all the things put on their plate. To combat the subsequent plate waste Congress passed what has been called the "offer versus serve" amendment which allows full Type A funds to senior high schools if students take from at least three of the five designated food groups.

Other lunch patterns than the Type A lunch have been suggested. One of these referred to as nutrient standard menus is a computer based approach which works to provide adequate amounts of those nutrients for which requirements have been established. It should allow more meal flexibility and more reliable provision of nutrients than the Type A lunch. Unfortunately the nutrient composition of many foods used is not known and computers are not always easily available. The method does hold promise for the future.

Realizing that students may discard or not select vital nutrients, some advocate fortification of foods which are popular with children. They point out that an added benefit of this method is that a more limited selection of foods would be made available which should reduce cost. Food and labor costs are rising rapidly and it is increasingly difficult to meet the budget with available subsidies without increasing price to students (Table 2).

## The Future

### Breakfast Programs

The Child Nutrition Act passed in 1966 established a pilot program for schools to serve breakfast to needy children and those with long bus rides. The program was expanded after the 1969 White House Conference on Food, Nutrition and Health. In 1972 there was additional expansion to allow all schools to participate and in 1975 Public Law 94-105 was passed giving permanent authorization to the program. In fiscal year 1978, 115,285 Florida children were served over 21 million breakfasts in 915 participating schools. Critics of the program feel that it is the responsibility of parents to provide children with breakfast. Advocates point to the fact that families which eat breakfast together are becoming rarer and estimate that over 30% of all children prepare their own breakfast. It has also been established that 37-50% of all children receive an inadequate morning meal.

### Food and Nutrition Education

Emphasis seems to be shifting more and more to using the school lunch program as a teaching tool. The hope is that students will not only learn how to make sensible food and nutrient selection but will develop lifelong eating habits related to this information. It is further hoped that the atmosphere of the lunchroom will be such that students will learn to relax while eating and use the meal table as a place to exchange ideas and thoughts while slowing the pace. There are those who would serve at least some of the meals in the classroom.

There are problems. One is the fact that in recent years teachers have negotiated their contracts so they no longer spend time in the cafeteria with their students. The logistics of scheduling and seating have already been discussed. Another problem is that the cafeteria supervisors are not considered members of the faculty

and have little input to curriculum planning or knowledge of what's happening in the classroom. Referred to earlier is the fact that many teachers and principals are lacking enough nutritional education to appreciate adequately the long and short range benefits of the lunch program or the teaching of nutrition.

But nutrition education is an idea whose time has come and there seems to be no doubt that it will be increasingly emphasized. Students are interested in such things as obesity, vitamin supplements, "organic" foods, vegetarian diets and many other food related topics.

The Florida legislature is interested. In its 1978 session it added the requirement that nutrition education be specifically included in the Comprehensive Health Education Bill which it funded categorically in the same session. Congress is also working on a comprehensive health education package. In 1977, President Ford signed into law a bill which gives 50 cents per school child to each state for the purpose of teaching nutrition. Neither of these bills deals specifically with school lunch programs but there is an obvious relationship. Some consider them piecemeal approaches and feel there must be better coordination between food preparation, nutrient delivery and health education.

### Summary

The National School Lunch Act became law in 1946. This act which followed approximately 100 years of interest in feeding school age children has acted as the framework for a program which has been growing and changing ever since.

School food service professionals have been looking seriously at such problems as plate waste, nonattendance at school cafeterias, provision of adequate nutrients, coupling of feeding with learning and establishment of sound eating habits. Their job has been made difficult by problems of money, school scheduling and dining area space, and lack of administrative support. Despite these handicaps the program is generally running fairly well and providing real service to many children. The hope for the future is that through research and through education of legislators, parents and school administrators, the problems will lessen. Then eating at school will become a more effective area not just for provision of nutrients but also as a center for comprehensive health education.

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# The WIC Program Tying Supplemental Foods to Nutritional Needs


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On November 10, 1978, President Carter signed into law S-3085, the Child Nutrition Amendments of 1978. In this legislation was included provision for continuation of funding for the Special Supplemental Food Program for Women, Infants, and Children (WIC). It was characteristic of the history of WIC that this decision by the President was a cliff-hanger, with a real possibility of a veto as urged by the Office of Management and Budget. It appears that only last minute intervention by a coalition of groups interested in child nutrition urging the President to sign the bill saved the day for WIC.

In his statement, the President acknowledged that WIC has had success in improving the health of low income, pregnant and nursing women and young children. He acknowledged that the program is fully


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consistent with his commitment to preventive health measures and could even result in a reduction of hospital expenditures and Medicaid costs. This program has had enormous support throughout the country and it is difficult to argue against the need for proper nutrition in pregnant and lactating women and growing infants and children. Why, therefore, has the WIC program been such a controversial issue from its very inception and what are its real strengths and weaknesses in providing benefits for those designed to be helped by the legislation?

### History of WIC Legislation

The history of this legislation began during the late 1960's when three surveys concerning the nutrition and health of the poor in this country were made. Between 1968 and 1970, the Ten-State Survey,[1] A Study of Nutritional Status in Pre-School Children in the United States,[2] and A Nutritional Survey of Pre-School Children From Impoverished Black Families in Memphis[3] were accomplished. Findings were identical. A significant proportion of infants and children were smaller than expected and a dietary deficiency of iron was evident in up to one half of these children between ages one and two years. There was a clear correlation of the findings of undernutrition with income, with an increasingly greater frequency of small stature and evidences of iron deficiency. A review of dietary patterns supported the judgment that the undernutrition was caused by decreased food intake, not inappropriate diet. In none of these surveys were gross evidences of vitamin deficiencies found, nor severe protein-calorie deprivation characteristic of developing countries.

The implication of these findings of undernutrition among the poor of this country for subsequent development and performance of the children is not clear. There is good documentation that severe undernutrition during infancy affects subsequent physical growth and intellectual functioning.[4] The direct relationship between moderate undernutrition and subsequent growth and intellectual development, however, is still unknown.[5,6] It may be that the developing child has great reserves with respect to its developmental capacity and moderate undernutrition will not pose a significant hazard. However, our inability to define the hazards of moderate undernutrition during infancy may also reflect the lack of sensitivity of our current testing instruments to pick up these differences in intellectual capacity. Furthermore, many factors influence a child's development and it is difficult to selectively evaluate nutrition as one among many of these environmental influences.

Even though the findings of moderate undernutrition among the poor of this country could not be assigned a definitive role with respect to health and development, a clear concern was registered in Congress. In 1972, primarily due to the efforts of the late Senator Hubert Humphrey, Congress authorized the development of a pilot program to test the efficacy of special supplemental foods for pregnant and lactating women and infants. The initial program was authorized for two years and was to be supported by funding levels of $20 million annually. The population eligible to receive these benefits were "pregnant or lactating women and infants determined by competent professionals to be nutritional risks because of inadequate nutrition and inadequate income." The Congress also authorized an evaluation of this program so that its results could be reviewed by Congress at the end of the initial two-year period. The legislation was designed to study the efficacy of nutritionally defined food supplements in a special population at high risk for malnutrtion.

At this point the perilous journey of the WIC Program began. The United States Department of Agriculture expressed reluctance about being able to administer the program because of the medical evaluation component and for five months tried to convince the Department of Health, Education and Welfare that the administration responsibilities should rest there. After five months of negotiation HEW finally declined and at this point the USDA indicated it would be improbable that the funds could be allocated for programs during the first fiscal year. However, Congress and also interested community people applied pressure and in March 1973 the USDA did convene a Task Force for program development. Subsequently, a suit was filed resulting in a consent order signed by the USDA indicating that the unspent $20 million from the first year would be carried over into the second year, making a total amount of $40 million for fiscal year 1974.

Delays in processing grant applications further slowed implementation of the program. Only a few grants had been made by fall 1973 and in November a second court action was required to order the USDA to announce all of the years grants by December. Start-up time delays for the designated sites meant that only 110 of the 255 programs were actually in business by March 1974, three months before the end of the second fiscal year. A number of short-term grants were made to commit all the allocated money, but that meant the annualized funding level far exceeded the $40 million. Congress, in June, authorized $100 million for an additional year of funding.

In spite of the difficulties in getting this program underway, by 1974 there were an estimated 204,000 participants in the program. Unfortunately, the contract for evaluation of the WIC Program was not signed until November 1973 and, thus, the results were not available to Congress at a time that action on new legislation was

needed. Public Law 94-105 extended this program in 1974 through fiscal year 1978 and increased the authorization of appropriations to a funding level of $250 million for fiscal year 1976 and each succeeding fiscal year through fiscal year 1978.

Presently, there are about 70 agencies in 48 states, Puerto Rico and the Virgin Islands administering the WIC Program. Only six states operate the program on a statewide basis. There are 1,300 operating WIC clinics. There are over 1,600 counties in the United States that have not implemented the WIC Program. At this time it is estimated that 1.124 million women, infants, and children are participating in the WIC Program out of an estimated 8.3 million low income individuals who are potentially eligible but who are not now being reached by the program.

Certainly, the WIC Program has proved to be one of the most popular of governmental programs in recent years. At all levels from national organization through state agencies to the community level and to the participant there has been a consensus concerning the program's value. The programs have been changed to include a provision that there must be association with a health care facility. The new bill stresses once again the need for an ongoing evaluation of the results of the program. There has been an effort to assure the program will be delivered to those most in need by adding the income stipulation. The eligibility criteria have been further refined to define nutritional risk as (a) detrimental or abnormal nutritional conditions detectable by clinical or anthropometric measurements; (b) other documented nutritionally related medical conditions; (c) dietary deficiencies that impair or endanger health; or, (d) conditions that predispose persons to inadequate nutritional patterns or nutritionally related medical conditions including, but not limited to, alcoholism and drug addiction.

Why then was there such a risk of veto for this popular bit of legislation which has been recognized as contributing to the health of pregnant and lactating women and infants and children? The decision to veto this legislation came from the Office of Management and Budget. With increasing concern for governmental expenditures, all programs have come under close scrutiny. Congress had increased the funding level from an apparent $250 million in fiscal 1978 to $550 million in fiscal 1979 and a guaranteed $800 million in fiscal 1980. This seemed to be an enormous jump to OMB. However, the actual level of funding for fiscal 1978 approached $440 million because of court orders requiring a carry over of unspent funds from previous fiscal years. Therefore, the real increase in activity was not as large as it seemed and to the supporters of this bill the added monies were necessary because of the great number of counties still unserved by WIC and the relatively small proportion of potentially eligible people who were receiving its benefits. The guaranteed funding for 1980 was felt necessary because of the difficulties this program had had in the past. It seemed a clear time for providing a period of stability for program development. Perhaps now this program, with its stormy period of gestation and hazardous childhood can enjoy a period of growth and development with this financial nourishment from Congress.

### Evaluation of the WIC Program

For all the legislative and administrative fireworks what, in fact, has the WIC Program accomplished with respect to improving the health of the women and children involved? The original intent was to mount a pilot project which would provide information about the value of such special supplemental food programs. As indicated, it was unfortunate that the contract for evaluation was not signed until November 1973. At that time, the programs were already getting underway and it was impossible to coordinate data collection prospectively. It was found that even such apparently simple measurements as height and weight were difficult to determine accurately with inexperienced personnel. There was no time for training programs or assessment of quality control for the various measurements. Other problems that arose in this difficult study were the lack of a true control group, the inability to link patients so that initial and follow-up visit data could be analyzed, a large drop-out rate and the inability to always assess reasons for inclusion of an individual in the WIC Program. Under the circumstances, therefore, the inability of this medical evaluation to provide definitive information is understandable.

Conclusions that were reached by the principal investigator of this study were that an acceleration of growth in weight and height was associated with the WIC Program and that there was a consistent increase in the mean blood hemoglobin concentration and a reduction in the prevalence of anemia. Pregnant women participating in the program gained more weight than women in the initial population and there was an increase in the mean weight of babies born to women in the program. A reduction in anemia rate among these women was found. Because of the constraints of the study, these data cannot be accepted as conclusive with respect to the benefits of the program.

There have been individual reports from single programs or state programs indicating that the beneficial effect has been noted in infant weight gain, reduction in anemia rate, increased birth weight of infants born to mothers on the program, and an increase in clinic participation for general health care for participating

infants, children, and women. Unfortunately, all this information has been gathered without standardization of procedures and presented in forms which make it impossible to critically evaluate.

Perhaps one of the greatest needs for this program at this time is a careful analysis of benefits. Individual programs have indeed demonstrated that nutritional benefits from Federal Food Assistance Programs occur.[7] A review of the problems of evaluating the nutrition and health benefits of a special supplemental food program has been prepared.[8] In that review, a series of recommendations are made for future evaluations of the WIC Program. There has been no systematic evaluation undertaken by the USDA since the completion of the report of the initial study. The current legislation calls for such an evaluation, which hopefully will be done in such a manner that the data collected can be critically analyzed. This evaluation is going to be absolutely essential if any attempt to assess the cost benefit ratio of the program is undertaken. The current legislation has extended the program for four years. Hopefully, at the end of that time these answers will be available.

For all the difficulties in analyzing medical benefits there is no question about the acceptance of this program. Even if the information available is anecdotal, there are sufficient numbers of testimonies to lend weight to the program's value. According to field experience participants in the program attend clinic more regularly and women enter the program earlier in pregnancy. In some settings the WIC Program has introduced people to a system of health care for their children. Thus, not only has the supplemental food apparently improved the nutritional status but it has served as an inducement for participation in a health care program. The impact of nutrition education as a part of this program is difficult to assess but there is a general feeling that the participants are more knowledgeable about food and its importance. Thus, while the evidence remains soft, it is all supportive of the program's value.

## Conclusions and Future Directions

With support for the program guaranteed for the next two years, there should be time to consolidate the gains made in developing and administering it. Currently the USDA appears to be an enthusiastic defender. Much has been learned in some states about such administrative matters as data collection and processing. Distribution of food has been developed for individual communities according to their needs. Experienced people are now available for the conduct of this program in local communities.

There still remain some basic issues needing resolution. One of the most important, in my opinion, is the problem of eligibility criteria. From the very beginning this program was designed to be preventive rather than remedial in nature. The current eligibility criteria stresses evidences of nutritional deficiencies for eligibility rather than the risk of developing these deficiencies. As physicians, we are primarily concerned with preventing growth failure and iron deficiency rather than correcting it when present. Sufficient studies are now available to properly identify the population at high risk for nutritional deficiency.

One of the real advances of this program has been to recognize the relationship of nutrition and health care for pregnant and lactating women, infants, and children. In this country, at this time, we are much aware of the needs for preventive measures with respect to health in order to reduce the increasing health care costs. In many respects the WIC Program is a model for this kind of approach.

Clearly, one of the most important needs of the WIC Program at this time is a solid evaluation of results. It can be hoped that the USDA will mount such an effective evaluation program as soon as possible and avoid the difficulties of the first study.

This program has been a unique effort on the part of Congress to provide a defined food package to a group of people found to be at high nutritional risk. Perhaps one measure of its success has been the ability of the program to weather the storms of the years since its inception. It will be interesting to see its further progress as it enters the relatively tranquil seas of guaranteed support during the next few years.

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# Public Health and the Practicing Physician Partners in Community Nutrition

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A recent cartoon shows a bewildered consumer pushing her cart down the aisle of a supermarket. She passes four signs — "Health Food," "Soul Food," "Junk Food," and "Food Food."

Where do your patients get their information about food — from TV, newspapers, magazines, health food stores, books, family, friends, neighbors, fellow workers or fellow students, teachers, health professionals, weight control groups, health organizations?

This nation is experiencing an explosion of nutrition information and misinformation. Your patients are being bombarded by hundreds of nutrition messages from many sources. Some are valid and scientifically-based; some costly, but neither helpful nor harmful; others actually damaging, and some perhaps even fatal such as the extreme stages of the Zen Macrobiotic diet or some of the liquid protein diets used for weight control. How does the individual select the messages which will determine his food patterns and eating behavior?

Food patterns are the result of numerous forces which operate within the life of each individual. Persons eat as they do because of cultural influences, religion, family background, tradition, socioeconomic factors, education, advertising, and lifestyle. Health and medical advice may determine eating patterns if the individual is convinced of the relevance of his diet to his health status but, in many instances, considerations other than health and well-being are more cogent influences.

"Nutrition is an emerging art and science which integrates a broad spectrum of disciplines, ranging from biochemistry and medicine to statistics, anthropology, and public health."* Nutrition science has moved rapidly from the dramatic discovery of the vitamins and amino acids and their roles in human health and disease to a better understanding of fats and micronutrients and the interrelationships of all nutrients. Scientists are becoming increasignly aware of the interactions of nutrients and drugs. For example, alcoholism, in addition to its effect upon the liver, may increase primary nutritional deficiencies, and the use of oral contraceptive agents increases the body's need for vitamin $B_6$ and folic acid. A marked decrease in the prevalence of the deficiency diseases — goiter, pellagra, scurvy, and rickets — has been noted since the food enrichment program has enhanced the value of some of the most basic foods. Nutrition surveys, however, indicate that there is no room for complacency about the nutritional status of the population, for specific cases of clinical and subclinical malnutrition have been identified. Ironically, many of the nutrition problems currently observed are the result of excesses or overconsumption. Among the ten leading causes of death, at least six can be considered to have diet as a major risk factor: heart disease, cancer, stroke, cirrhosis, diabetes, and arteriosclerosis.

With increasing emphasis, practicing physicians and public health leaders are urging individuals to assume greater responsibility for their own health care. In practical terms, this means adopting a lifestyle which will minimize their risk factors — those variables which have been found to be statistically associated with a high incidence of disease. Individuals are being taught to choose an appropriate diet to maintain optimum nutrition and desirable weight, to avoid hyperlipidemia and hypertriglyceridemia, to avoid cigarette smoking, to find healthful ways of handling stress, and to follow a program of physical activity appropriate to their health status.

In early 1977, the Senate Select Committee on Human Needs issued a report, "Dietary Goals for the United States," and revised the goals somewhat in the second edition later that year. Although the goals (Table 1) have been disputed by some clinicians and nutritionists, they have received broad acceptance in principle. They are considered a first step toward recommending the kind of food pattern which would aid in reducing the risk of developing certain diseases. The Dietary Goals point to a way of eating similar to the "Prudent Diet" which was developed by the late Dr. Norman Jolliffe and his staff of the Bureau of Nutrition, New York City Health Department. Its effectiveness in lowering elevated blood cholesterol in men and reducing heart attack rates was demonstrated in the experience of the Anti-Coronary Club. The American Heart Association has recently

*Nutritional Assessment in Health Programs, Proceedings of a conference held October 18-20, 1972, G. Christakis, editor, American Public Health Association, Washington, D.C. 20036, 1973, $4.00.

Figure 1

**Table 1.—Dietary Goals for the United States.**

(a) To avoid overweight, consume only as much energy (calories) as is expended; if overweight, decrease energy intake and increase energy expenditures.
(b) Increase the consumption of complex carbohydrates and "naturally occurring" sugars from about 28% of energy intake to about 48% of energy intake.
(c) Reduce the consumption of refined and processed sugars by about 45% to account for about 10% of total energy intake.
(d) Reduce overall fat consumption from approximately 40% to about 30% of energy intake.
(e) Reduce saturated fat consumption to account for about 10% of total energy intake; and balance that with polyunsaturated and mono- unsaturated fats which should account for about 10% of energy intake each.
(f) Reduce cholesterol consumption to about 300 mg a day.
(g) Limit the intake of sodium by reducing the intake of salt to about 5 g a day.

To achieve these goals, the following changes in food selection and preparation are recommended:
(a) Increase consumption of fruits and vegetables and whole grain.
(b) Decrease consumption of refined and other processed sugars and foods high in such sugars.
(c) Decrease consumption of foods high in total fat and partially replace saturated fats, whether obtained from animal or vegetable sources, with polyunsaturated fats.
(d) Decrease consumption of animal fat, and choose meats, poultry and fish which will reduce saturated fat intake.
(e) Except for young children, substitute low fat and nonfat milk for whole milk and low fat dairy products for high fat dairy products.
(f) Decrease consumption of butterfat, eggs and other high cholesterol sources; some consideration should be given to easing the cholesterol goal for premenopausal women, young children and the elderly in order to obtain the nutritional benefits of eggs in the diet.
(g) Decrease consumption of salt and foods high in salt content.

Dietary Goals for the United States,
Second Edition
Government Printing Office
Washington, D.C. 20402

issued an updated statement, "Diet and Coronary Heart Disease" for physicians and other health professionals, and it, too, advocates similar modifications.

## Is There Such Thing as a Typical American Diet?

One can identify a number of trends or movements, but it is impossible to generalize about or describe a typical diet. Some of the popular trends are described below:

**The "Fast Food" Craze.**—About 40% of all meals are eaten outside the home. A high percentage of those meals are eaten in fast food restaurants which have proliferated throughout the country. Those meals tend to be high in saturated fat and lacking in fruits and vegetables. An encouraging development has been the addition of the salad bar by some of the fast food chains. Some experts believe that the industry would respond to a demand for leaner beef if the public became more assertive.

**Gourmet Cookery.**—Devotees of this school seek the exotic, the unusual, the elegant. Most gourmet cooks shun prepared and packaged items, preferring to create every recipe from scratch. Cooking is perceived as a creative, artistic endeavor, and its results challenge and appeal to all the senses. Gourmet cooking has shifted from the very rich, high-calorie menu with many courses to a simpler, more temperate menu.

**The "Health Food" Culture.**—Many adolescents, young adults and elderly have been attracted to unprocessed, natural, organic foods. While those terms are hard to define and mean different things to different people, the members of this group have come to it from a concern for ecology, a dread of "chemicals," and a sincere belief that foods which they categorize as "health foods" have superior value.

While health food stores provide a wide range of nutritious foods, similar foods can often be found in conventional markets at lower costs. The danger of shopping in health food stores is that the customer is often pressured into purchasing foods or supplements which he does not really need. The validity of health information given the customer is highly variable and in some instances dangerous. Often, people have unrealistic expectations of what health foods can do for their particular problem, and they postpone seeking medical care or discontinue medical treatment.

**Vegetarianism.**—Advocates of vegetarianism can be divided into at least three categories. First are the ovolactovegetarians who refrain from eating meat of any kind but use milk, milk products, and eggs. Second are the lactovegetarians who avoid meat and eggs but consume milk and milk products. Third are the pure or strict vegetarians who eat only foods from plant sources. Some variations exist among these categories. Vegetarians choose their way of eating for moral, religious, or health reasons. A well-selected vegetarian diet, with suitable combinations of vegetable proteins to complement one another, can be nutritionally adequate. Some vegetarian groups have a very favorable health experience in contrast to the population at large. Strict vegetarians, who eat no food from animal sources at all, should use products fortified with vitamin $B_{12}$ or a supplement of that vitamin.

**Food Fads or Fad Diets.**—There are changing fashions in popular diet schemes and it is almost impossible to keep up with them. Most fad diets are promoted glowingly as marvelous, sure-fire, new discovery, "get-thin-quick-without-feeling-deprived" schemes,

and the obese are particularly vulnerable. Often the "Guru" is a self-styled "nutrition expert" who knows enough jargon and is sufficiently skilled at merchandising to be very persuasive. Because most fad diets do not lead to the development of new eating habits, weight loss is temporary and the individual waits for the next week's diet to come along.

**Moderate Ways of Eating.**—Among persons of all ages are those who eat a variety of nutritious foods in moderate amounts, recognizing the importance of eating wisely to maintain health and prevent illness. Some have been convinced by education; some have had the good fortune to be members of a culture that has a tradition of moderation; and others have been persuaded by their health advisors to modify their diets as an important part of a treatment plan.

These groups are not mutually exclusive and there is considerable overlap among them. Many individuals deviate from their usual pattern on special occasions. For example, the normally cautious eater goes on a cruise!

There are psychological, social, and economic reasons for our choosing one style or another, and the health professional can guide the individual to select from the infinite variety of available foods to meet his nutritional needs without abandoning his usual preferences entirely or sacrificing the pleasures of good food.

The health professional should avoid the mistake of assuming that the patient eats as he/she does or of attempting to counsel the patient regarding diet without knowing his present food habits.

## Public Health and Community Nutrition

Public health or community nutrition is an integral part of a modern public health department. Charged with responsibility for the health of population groups through safeguarding the environment, performing regulatory functions, and controlling communicable diseases, public health also directs its efforts toward prevention of illness and, in some areas, provides primary health care to the medically indigent.

Whether seen in private practice or public health services, some groups are nutritionally vulnerable and require diet counseling. Among those who receive guidance from physicians, nurses, or nutritionists are women during pregnancy, mothers of infants and children, and patients who have diabetes. Patients with heart disease, hypertension, anemia, cancer, obesity, and other diet-related conditions are also high-priority groups. It is important that physicians, nurses, and health educators be equipped with nutrition knowledge so that they may counsel patients when indicated.

Health education and nutrition guidance are important components and, as knowledge and experience increase, concepts of behavior modification and risk factor reduction, applied in group settings, are utilized more frequently and more effectively.

The Palm Beach County Health Department conducted an innovative and effective program in Cardiovascular Risk Factor Detection and Reversal from 1974-1976 with funding from the Florida Regional Medical Program. Clinic patients 18 to 59 were offered a series of tests to determine their cardiovascular risk factor status. Age, sex, height, weight, blood pressure, and smoking history were recorded. The study included: serum cholesterol, triglyceride, glucose, and uric acid determinations. Patients whose risk factors were extremely elevated were referred to the medical clinic. Those whose risk factors were moderately elevated were enrolled in an intervention program. Through a series of group discussions and demonstrations, participants learned how to make behavioral and dietary changes and thereby lower cholesterol and triglyceride levels, control weight, manage hypertension, and cope with stress.

The project was accomplished with the cooperation and support of the Palm Beach County Medical Society, Palm Beach County Chapter of the American Heart Association, and Florida Atlantic University. It demonstrated that a county health department could successfully mobilize its resources to launch a risk factor detection and reversal program and that individuals of low and middle socioeconomic status would respond favorably with encouraging outcomes.

Such an approach might serve as a model to be used in group practice.

In 1970 the Palm Beach and Lee County Health Departments participated in conducting a Migrant Nutrition Study. That study, described in the monograph, "Families of the Field," revealed that the most common health problems associated with nutrition were iron deficiency anemia and growth deviations, reflected in both underdevelopment and obesity. A unique feature of the study was that it included a nutrition education component. Classes were conducted in specially equipped vans at those migrant camps where the highest incidence of nutritional deficiencies had been identified. Classes for adults and children taught families what foods were best sources of needed nutrients and demonstrated ways of preparing those foods. Resurvey revealed evidence of dietary changes, particularly in increased iron intake in young children and decreased caloric intake by the obese. A short-term educational program helped participants to increase knowledge of food buying practices and community resources.

## Are You Using Community Resources?

Health Departments and practicing physicians should recognize, utilize, and develop community resources which may actually provide resources for food

or may assist in educating patients. For assistance in utilizing these resources, the public health nutritionist or other health department professionals may guide the patient in learning about them.

### Resources for Food Assistance

**Food Stamps.**—A national program which provides food stamps to persons below a specified income level, enabling them to purchase a more adequate diet than would be possible otherwise. Patients in need of food stamps should be referred to the local Department of Health and Rehabilitative Services Food Stamp Office where their eligibility will be determined.

**WIC.**—A special Supplemental Food Program for Women, Infants, and Children. WIC serves pregnant, postpartum, and lactating women, infants up one year and children up to five years. Patients must be medically indigent and must be certified to be at nutritional risk according to specified criteria. WIC coupons provide designated foods of high nutritional value. WIC is considered "food by prescription." About 48,000 participants in Florida receive the benefits of the WIC program and it is being expanded substantially. This progrm is generally operated through the county health department.

**School Lunch and Breakfast.**—The school lunch is almost universally available but school breakfast is less common. Teachers and school nurses have frequently observed that youngsters are more alert and perform better in school if they have had some nutritious food in the morning. The provision of school breakfast should be encouraged in those areas where children come to school without breakfast either because the parent does not prepare it or the busing schedule requires such an early departure that the youngster cannot eat breakfast. Children from low income families may be eligible for free or reduced price meals. With the passage of the Comprehensive School Health Education Act, health education and nutrition education should be strengthened at all grade levels and in all school systems.

**Congregate Meals for the Elderly.**—This program serves persons over 60. Many elderly persons lack the incentive or sense of self-worth to prepare meals for themselves. Some live on very limited incomes. Preference is given to those who are socially or geographically isolated and may not have the knowledge or resources to eat a nutritious diet. Congregate meals provide good nutrition plus socialization.

In some areas, a pilot program called "Super Suppers" was instituted in 1978 as a supplement to the Congregate Meals Program which operates five days a week. "Super Suppers" are packages of prepared foods in easy-to-manage containers. Each package constitutes a meal which meets the guidelines of the Title VII program by providing one third to one half of the Recommended Dietary Allowances. Eight different menus are available and they are rotated. Prior to weekends and holidays, participants receive "Super Suppers" for those days.

The local Health and Rehabilitative Services District Program Office of Aging and Adult Services will direct persons to the program.

**Home Delivered Meals for the Handicapped and Disabled.**—The Home Delivered Meals Programs, popularly known as "Meals on Wheels," are limited. This may be a valuable resource for a patient who is convalescing from illness or surgery. Some services are operated by public agencies, other by voluntary groups such as church groups, hospital or medical society auxiliaries, and still others by commercial firms.

### Resources for Counseling and Education

In addition to those programs which provide food, or the wherewithal for obtaining it, there are usually other agencies or services which can assist you, the physician, in guiding your patients toward reliable nutrition information. Not all of these services are available in every area, but checking with the local Information and Referral Service or the county health department will help to identify resources.

### Outpatient Counseling Services

In some communities, hospitals offer diet counseling, for a fee, on an outpatient basis. The physician whose practice does not permit him to spend sufficient time for effective diet counseling may refer patients to these services.

### Dietitians as Members of Group Practice

Some physicians have added a dietitian to the group, on a full-time or part-time basis, and members of the group refer patients for counseling.

### Dietitians in Private Practice

Dietitians, working alone or with other dietitians, have set up private practice and accept referrals from all physicians in the community. Area physicians should make contact with dietitians and nutritionists through their District Dietetic Associations or through the staff of the hospital with which they are affiliated.

The terms "dietitian" and "nutritionist" refer to the same discipline and describe persons who are trained in the science of nutrition and have as their goal the optimal nourishment of people. The term "dietitian" is often considered the generic term. Usually, the dietitian is involved in food service as well as therapeutics, while the nutritionist, who has had additional educational preparation, is involved in community programs for the promotion of health and control of disease.

### Visiting Nursing Association, Visiting Homemaker Service, and Other Home Health Care Agencies

These agencies provide bedside care in the home under the orders of the patient's physician. The nurses have had preparation in nutrition and can help the patient and/or his family interpret and apply dietary instruction. Home health care may be available under various auspices. Staff have had some training and should be skilled in preparing recommended foods for the patient.

### American Heart Association (Local Chapter)

This national organization has shown outstanding leadership in developing materials for professional and lay use. Leaflets and booklets are available on diet and coronary heart disease, diet modification to control hyperlipidemia in childhood and adolescents, sodium restriction, the fat controlled diet, risk factor reduction, exercise, smoking cessation, hypertension, and other related subjects. In many counties they conduct community screening programs, always referring those individuals with elevated risk factors to their own physicians for care. In some areas, the Heart Association provides diet counseling by a registered dietitian, upon referral by a physician. Community education programs and seminars for professional and lay persons are offered.

### American Diabetes Association (Local and State Affiliates)

In cooperation with the American Dietetic Association, the national organization has revised the Exchange Lists for Meal Planning, a useful plan for counseling patients in diabetes or weight control. The bimonthly magazine, "Forecast," has an upbeat, positive tone which provides information and encouragement to readers. Regular meetings of the local group offer individuals who have diabetes, and their family members, the opportunity to hear speakers on a variety of subjects which concern them and to participate in group discussion. At least one meeting each year is devoted to diet.

### Cooperative Extension Service (Affiliated with University of Florida)

Each county has agents trained in home economics. Some have Expanded Nutrition Projects through which trained aides and materials are available for information on normal nutrition, food budgeting, marketing, and preparation. Since many families lack basic skills, they may obtain practical help from this resource.

### Adult Education—Community Schools

Schools may offer courses in normal nutrition in their evening programs. If combined with courses in other health-related topics, this may be valuable. Local medical societies and health departments should check content of such courses and qualifications of the instructors before endorsing or recommending such courses.

### Weight Control Groups

The overweight patient presents a great challenge to physician and nutritionist. Many individuals respond better to group efforts at weight control based on behavior modification than to individual counseling and/or instruction. Referral to a recognized, soundly-based group may be an effective procedure. Special food promotions are not essential.

## Clinical Practice and Nutrition

Public health and clinical medicine face the nutritional problems of "too much" and "too little," of malabsorption or impaired utilization of nutrients, of imbalance, of interfering interactions with alcohol or drugs.

Steps in approaching and dealing with nutritional problems are comparable to procedures in dealing with any health problem. They include awareness of the nutritional determinants of disease; nutritional assessment; diagnosis based on physical examination, laboratory data, and diet history; treatment, and follow-up. These nutrition items should be an integral part of a comprehensive medical assessment.

**Diet History.**—When diet counseling is indicated, the first step is to learn the patient's present food pattern. Many diet history forms are available and the form may be self-administered or filled out by the health staff. It may be simple or complex. The physician or other health professional needs to know the patient's home situation, who prepares the food, what resources are available (cooking equipment, refrigeration, storage facilities), access to markets, approximate amount of money available for food. A diet record of several days gives a more complete picture than a 24-hour recall, but is harder to obtain. The combination of the 24-hour recall plus frequency information (how often do you eat green leafy vegetables? for example) is useful in making the patient more aware of his eating behavior and enabling the therapist to evaluate strengths, weaknesses, deficiencies, and excesses in his food pattern. A food diary of seven to 14 days is valuable for weight control, diabetes, and other situations where food consciousness is critical. Its value is enhanced if the patient records time of day at which food or beverage is taken, the environment, (work, home, restaurant), other person or persons present, the kind and amount of food, how it was prepared, and the individual's mood or emotional state as he consumed the food or beverage. If a diet modification plan is to be effective, it must include setting of goals, learning new food behaviors, and some follow-up for reinforcement and/or evaluation.

## Continuity of Care

The diet counselor should interpret the diet in terms of the patient's home and work situation and lifestyle. If necessary, there should be referral to another agency or a suggestion that the patient call for further explanation. Recommendations may seem clear in the office, clinic or hospital, but very fuzzy when the patient is on his own.

It is desirable that the spouse or another family member participate in the instruction, especially if the patient is not the one who purchases and prepares the food. If the patient's diet can be adapted to the family's meals, the entire family may benefit and the patient may find it easier to follow dietary recommendations.

When a patient is hospitalized, the hospital experience should be educational as well as a treatment opportunity. The hospital food should exemplify the type of diet which the patient should have—for all his health needs. The patient should learn kinds of foods to eat and size of servings. Recently, a 70-year-old man who had been on a fat-controlled, cholesterol-restricted diet since his coronary eight years ago was terribly upset because he was served eggs and butter for breakfast when he was hospitalized for surgery of the prostate!

The hospitalized patient should receive diet instruction early in his hospitalization, not when he is about to be discharged. Too often the dietary department receives the request for diet instruction just prior to discharge. "Suitcase counseling," when the patient is packing to go home, is apprehensive about paying the bill, about leaving a protected environment or about a dozen other things, can hardly be effective. In the coronary care unit of a well-known teaching hospital, the policy states that the physician must order diet instruction at least three days before the patient's discharge or the dietary department does not provide it. The majority of patients do receive diet instruction.

In conditions which require modification of diet, the following principles are important:

1. The diet should be as nearly adequate as possible. If it is deficient, appropriate supplements should be prescribed.

2. Only those components of the diet which affect the patient's condition should be modified.

3. The diet should be individualized according to his likes and dislikes, present food habits, resources, and lifestyle.

4. The patient needs to know what to eat—kinds of food and amounts — and what not to eat. Such admonitions as "don't eat salt," or "watch carbohydrates," "try a 1000 calorie diet" or "eat a lot of fiber" mean little to the worried patient who has no knowledge of food composition and caloric values.

5. The patient needs to know whether a diet modification is short-term or long-term. If it is the latter, he needs help in developing a new eating pattern — one with which he can live for the rest of his life.

6. The counselor must strike a balance between an attitude that is too casual and an attitude that is so rigid and punitive that the patient feels frightened and terribly guilty if he deviates from the food plan at all.

## Summary

Some current nutrition issues and concerns have been discussed from the perspective of a county health department. The practicing physician and the health department should try to help individuals assume responsibility for their own health care and develop a lifestyle which includes, among other things, a prudent diet, based on moderate amounts of a variety of nutritious foods. Resources exist in every county to aid the individual who needs reliable information in understanding and following sound dietary recommendations. Making wise food choices is more than having information — although that is fundamental — because the behavior of people is altered through knowledge, understanding, and motivation.

There are opportunities for close working relationships among all health professionals, and private practitioners and public health practitioners will profit from a sharing of knowledge and experience. Continuing education in nutrition for prevention as well as for treatment should be encouraged.

The challenge of improving nutrition is an enormous one, but the promise of reducing illness and increasing wellness makes it an exciting one.

References are available from the authors upon request.

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# Alcohol, Malnutrition and Liver Disease

Charles S. Lieber, M.D.

Interrelationships between alcoholism, malnutrition, and liver disease are complex; alcoholism commonly causes both malnutrition and liver disease, and hepatic dysfunction may be engendered by malnutrition per se. Traditionally, the disorders affecting the liver have been attributed exclusively to nutritional deficiencies accompanying alcoholism, but recent studies, summarized here, indicate that in addition to dietary deficiencies, alcohol itself can be incriminated as a direct etiologic factor in the pathogenesis of alcoholic liver disease.

## A. Malnutrition in Alcoholism

The alcoholic derives a major portion of his caloric intake from alcohol and consequently has a much reduced demand for other foods to fulfill caloric needs. For example, alcohol (ethanol) provides 7.1 kilocalories/gm; thus, 600 ml (20 oz) of 86-proof liquor represents about 1,500 calories or approximately one half to two thirds of the daily caloric requirement. Alcoholic beverages differ little in nutritional value except for carbohydrate content, trace amounts of B vitamins (especially thiamine and niacin) and iron. Harmful amounts of lead, cobalt and iron may rarely be present. The significance of other congeners in beverages remains largely unexplored. Though calorimetrically the combustion of ethanol liberates 7.1 cal/gram, ethanol does not provide equivalent caloric food value when compared with carbohydrate[1]; this discrepancy is most likely the result of a metabolic effect of alcohol. Since alcoholic beverages do not contain significant amounts of protein, vitamins and minerals, the intake of these nutrients may readily become borderline or insufficient. Alcohol also has direct effects on the gut[2] and pancreas, part of which are concentration-dependent. Furthermore, alcoholics have been shown to display malabsorption for a number of essential nutrients, including vitamins such as thiamine and $B_{12}$.[2] One of the most common vitamin deficiencies in the alcoholic is the lack of folate; it is a cause for macrocytic anemia and intestinal malabsorption.

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## B. Role of Dietary Factors in the Pathogenesis of Liver Disease in the Alcoholic

Prevailing concepts concerning the pathogenesis of alcoholic liver injury have undergone a striking evolution. In the forties and fifties, it was generally accepted that "there is no more evidence of a specific toxic effect of pure ethyl alcohol upon liver cells than there is for one due to sugar".[3] This view was virtually universally espoused and until recently most textbooks of medicine reiterated that there was no evidence supporting the toxicity of ethanol itself. As stated in the 1958 edition of Harrison, it was "generally agreed that alcohol is not a hepatotoxin and that its effects on the liver probably are secondary to an associated nutritional disturbance."

This concept of the exclusively nutritional origin of alcoholic liver injury was based on both experimental and clinical studies. In rats, it has been shown that alcohol given in the drinking water was not capable of producing liver damage unless associated with a deficient diet.[3] However, rats display a natural aversion for ethanol and under the experimental conditions used, intake is relatively small and blood ethanol level negligible. When the alcohol aversion was counteracted by incorporation of ethanol in a totally liquid diet, and the ethanol consumption was thereby increased to 36% of total calories (an intake still less than that of many alcoholics) fatty liver resulted despite otherwise nutritious diets.[4] The clinical data supporting the lack of hepatotoxicity of alcohol consisted of several studies according to which alcohol could be administered without apparent untowards effects in a hospital setting.[4]

These studies however had several shortcomings. In some, alcohol was administered to heavy drinkers in amounts clearly below those consumed spontaneously. In other studies, larger amounts were given but in doses carefully calculated not to exceed the alcohol oxidizing capacity of the individual thereby preventing a significant increase in the blood level of alcohol; furthermore no control studies were carried out simultaneously. Moreover, virtually all of these patients had underlying cirrhosis. Therefore in these studies it must have been difficult to assess further changes especially since no chemical measurements were carried out in these biopsies.

### 1. Role of protein and lipotropes

That dietary factors can modify the effect of alcohol on the liver has been clearly shown in rodents. Alcohol increases choline requirements, possibly by enhancing choline oxidation; choline supplementation reduces (but does not fully prevent) steatosis after chronic and acute alcohol administration.

Though in growing rats, deficiencies in dietary protein and lipotropic factors (choline and methionine) can produce fatty liver, primates are far less susceptible to protein and lipotrope deficiency and clinically, administration of choline to patients with alcoholic liver injury is ineffective in the face of continued alcohol intake. Furthermore in subhuman primates some fibrosis but, in virtually all studies, no cirrhosis was produced with protein deficiency alone. To cause cirrhosis, one has to create dietary conditions not normally achievable with natural foods (such as an association of a low protein and a high cholesterol content). Actually, to what extent nutritional deficiencies may potentiate the alcohol induced liver damage in the primate has not been as yet determined. In some patients subjected to intestinal bypass for obesity, lesions similar to those present in some alcoholics, namely hepatitis and fibrosis, have occurred and it has been concluded that therefore in both situations, a similar pathogenesis, namely malnutrition, may pertain. Such reasoning "by analogy" however is hazardous, since pathogenesis of the liver lesion after bypass is still unsettled. Even if malnutrition were shown to be the culprit in the latter situation, extrapolation to the alcoholic is not necessarily warranted. It could be argued for instance that similar liver lesions have also been engendered by chemical agents in man not to mention the experimental evidence referred to subsequently of the production of liver damage after alcohol and an adequate diet. Under those conditions, plasma branched chain amino acids are increased,[5] whereas after bypass, these are depressed. This illustrates one of the many differences between these two conditions.

In children, protein deficiency causes hepatic steatosis, one of the manifestations of kwashiorkor, but this disease does not lead to cirrhosis. Acute and prolonged starvation (as treatment for obesity or as a consequence of anorexia nervosa) even to the point of cachexia (as seen during times of war) do not necessarily lead to fatty liver. In adolescent baboons, a low-protein, low-fat diet (7% and 14% of total calories) did not result in liver injury on either biochemical analysis or light and electron microscopic examination, even after 19 months.[6] Severe protein restriction (4% of total calories) did, however, produce steatosis in the baboon.[6] Protein deficiency could potentiate the effect of ethanol. Administration of ethanol with a diet deficient in protein and lipotropic factors had more pronounced effects than that of either factor alone,[7] at least in rodents.

### 2. Role of dietary fat

Chronic alcohol ingestion leads to deposition of dietary fat in the liver.[8] Furthermore, for a given alcohol intake, much more steatosis developed with diets of normal fat content than with a low-fat diet.[8] The chain length of dietary fatty acids also affects the degree of fat deposition in the liver after alcohol feeding. Replacement of long-chain triglycerides with medium-chain triglycerides markedly reduced the capacity of alcohol to produce fatty liver in rats,[9] probably because of the propensity of medium-chain fatty acids to oxidation instead of esterification. The applicability of these findings to the clinical practice has not as yet been assessed.

## C. Alcohol as a Direct Cause of Liver Changes

Under metabolic ward conditions, it was shown that administration of ethanol caused not only a fatty liver as assessed morphologically, but also a striking increase in liver triglycerides measured chemically.[8] This was associated with marked ultrastructural changes of the mitochondria and endoplasmic reticulum, although the alcohol was administered with an adequate regimen supplemented with minerals and vitamins,[10] or even with a high protein diet. It was also shown that alcohol administration prevents the disappearance of the fatty liver. The question was then raised whether lesions more severe than steatosis, particularly cirrhosis, can be produced by alcohol in the absence of dietary deficiencies. Studies in rodents had been unsatisfactory because even when given with a liquid diet, the intake of alcohol in rodents does not reach the level of average consumption in the alcoholic, namely 50% of total calories. Such a consumption was achieved in the baboon again through incorporation of ethanol in totally liquid diets.[11] The nonalcohol calories of the diet were provided by protein (36% of total nonalcohol calories) fat (42%) and carbohydrate (22%). All of the other nutrients were calculated to exceed the normal requirements of the baboon (National Academy of Science, 1978). Choline was given at twice the level recommended for the baboons. This diet was also liberally supplemented with minerals and vitamins. The fat and carbohydrate composition of the baboon diet was calculated to mimic an optimal clinical situation in which the alcoholic may be trying to achieve a high protein diet (36% of calories) with available natural foods while drinking. In fact, even if the alcoholic tried hard it would be difficult for him to consume a diet richer in protein than the one administered to the baboons (36% of calories).

Nevertheless, the baboons developed not only fatty liver, but after 2-5 years, one-third had also progression of liver damage to cirrhosis.[12] Therefore it was concluded that in addition to dietary factors, alcohol itself plays a key etiological role in the development of liver injury. If one can extrapolate from these baboon data to the human situation, it would seem that heavy drinkers, even if they make an extra effort to maintain a high protein diet, will not necessarily succeed in preventing the development of cirrhosis unless they also control their alcohol intake.

The demonstration of the hepatotoxicity of ethanol also raises the question of a possible "threshold" of this action. As in the case of many other toxins, the effects of alcohol are subject to great individual variability. The response to ethanol varies as a function of hereditary factors, associated diseases, and particularly dose and duration of alcohol intake. Various epidemiological studies clearly showed a relationship between the incidence of cirrhosis in an alcoholic population and amount of alcohol intake whereas no role for dietary deficiency was revealed. Such a statistical relationship of the incidence of cirrhosis to the amount of alcohol consumed (but not to protein malnutrition) was shown for instance by Pequignot et al.[13] In fact, the individuals surveyed had developed cirrhosis despite an average daily dietary protein intake of 100 grams or more. In some other epidemiological study, hospitalized alcoholics reported a history of a poorer protein intake. However one cannot conclude from such observations to what extent, if any, the low protein intake contributed to the liver complications. In addition to showing that even diets relatively rich in protein do not preclude the development of alcoholic cirrhosis, earlier studies of Pequignot also revealed that the incidence of cirrhosis increased markedly when the daily intake of alcohol reached 160 grams. This was interpreted by some to indicate a "threshold" of toxicity of alcohol at that level. However, more recent studies of Pequignot et al.[13] have also shown that daily intake of alcohol as low as 40 grams in men and 20 grams in women resulted in a statistically significant increase of the incidence of cirrhosis in a well nourished population. Obviously, because of individual variations, the exact toxic level for a given subject is usually unknown. However, the public should be made aware of the fact that even with adequate diets, amounts of alcohol considered before as innocuous may indeed harm the liver. This is particularly pertinent in the case of women whose increased susceptibility was also indicated by a higher incidence of cirrhosis for a given alcohol intake: Wilkinson et al.[14] found indeed women to be more susceptible than men to the development of alcoholic cirrhosis. Nutrition again did not play an appreciable part in the causation of liver disease and cirrhosis was not found to be more common among the lowest socio-economic groups.[14]

## D. Summary and Recommendation

Experimental, clinical and epidemiological evidence indicates that even when adequate diets are consumed, ethanol exerts liver toxicity whereas the role of malnutrition in the development of human cirrhosis remains elusive. At present, the optimal diet for the alcoholic is not established. Obviously specific nutritional deficiencies such as lack of thiamine and folate should be avoided and when present corrected. Concerning protein, however, the situation is less clear. In rats, carbon tetrachloride induced cirrhosis can be prevented by a low protein diet. Early studies relating beneficial effects of high protein diets were uncontrolled. Subsequently the risk in cirrhotic patients of dietary induced encephalopathy has become more apparent. Therefore, in the absence of experimental data to the contrary, high protein diets do not seem indicated at the present time and until this issue is resolved it may be prudent to settle for an intake of proteins which does not exceed the individual protein tolerance of the cirrhotic or the recommended amount (0.8-1 g/kg), whichever is lower. Similarly, there is no indication for choline supplementation, especially in the absence of information regarding choline requirements in the primates and in view of the disappointing results with choline supplementation in the alcoholic. In addition to correction of the diet one must also focus on the control of the alcohol intake. Recent studies have shown that even in well-nourished populations, amounts of alcohol much lower than hitherto suspected must be considered as potentially cirrhogenic, particularly in women.

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# Hyperactivity and the Food Additive Free Diet

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Hyperactivity, and frequently associated learning disabilities, is the most common behavioral-developmental problem in childhood affecting, by the most conservative estimates, at least 5% of the childhood population. This psychiatric syndrome, most frequently referred to as hyperkinesis or minimal brain dysfunction, has been the subject of much controversy both in the medical and lay literature. Some of the more important issues concern the true incidence of the disorder, diagnostic criteria, and appropriate treatment, particularly treatment with stimulant medication. Negative feelings about the use of medication has stimulated interest in other forms of treatment, some of them nutritional. Probably the most widely publicized nutritional treatment for hyperkinesis involves the elimination of certain food additives from the diet. In this article the food-additive-free diet is described and the rationale for its use explained. Possible mechanisms of action for this and other nutritional therapies are discussed. Finally, the article reviews recent research on the food-additive-free diet and its effect on hyperkinesis. My conclusions are discussed regarding the efficacy and potential hazards of this nutritional treatment and lastly recommendations are presented for discussing these issues with patients and their families.

## Rationale for the Diet

The term "food additive" is a general one referring to any non-nutrient added to food for a variety of reasons including food preservation, or enhancing the food's palatability or appeal. The diet in question, however, is designed to remove only some food additives, specifically, all artificial food coloring and flavorings. Salicylates that occur naturally in some foods are also eliminated. The diet was originally developed to treat patients who are sensitive to salicylates. Salicylate sensitive persons react not only to the salicylates found in medicines but also to those occurring naturally in foods. Some of these patients also react to chemicals in certain artificial food dyes, particularly tartrazine which is the chemical constituent of the most commonly used yellow dye. Artificial flavorings that contain salicylate products (oil of wintergreen) as their base must also be eliminated. The food-additive-free diet, therefore, comes from, and is essentially the same as, the diet used in the treatment of salicylate sensitive patients. Why is this particular diet thought to help children with hyperkinesis? The diet was first recommended by Ben Feingold, M.D., an allergist.[1] He states that he observed several adult, salicylate sensitive patients whose psychiatric or behavioral problems improved while on this diet. On the basis of these observations he wondered if the diet might help children with common behavioral problems. He began employing the diet in the treatment of children with hyperactivity and/or learning disabilities. According to his reports several children improved dramatically on this special diet which led him to speculate that hyperactivity and learning disabilities were caused, in a substantial percentage of children, by food additives. He claims that the incidence of hyperactivity and learning disability is increasing in recent years (an undocumented assumption) as the result of the greater use of food additives in the American food industry.

## Proposed Mechanisms of Action

Dr. Feingold does not feel that food additives produce behavioral change on the basis of allergic mechanisms. Instead he thinks that hyperactive children are sensitive to the chemicals in food additives. Others disagree, however, and argue that some children are allergic to food additives as well as to specific foods, for example, corn, chocolate, wheat and milk. Some of these arguments can be clarified by understanding the differences between food allergy and food sensitivity. These differences are outlined in Table 1. In the case of definite food allergy, the reaction is immediate and the signs and symptoms are atopic regardless of the type of allergen. The reaction is IgE mediated, antibodies to the offending food can be clearly demonstrated, and the patient is skin test positive. A different type of food allergy results in a delayed reaction that may involve gastrointestinal as well as atopic symptoms. Such symptoms commonly include diarrhea, vomiting and/or abdominal

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## Table 1

FOOD ALLERGY

| Immediate | Delayed |
|---|---|
| 1. IgE mediated | 1. Perhaps IgE or lymphocyte mediated |
| 2. Definite atopic symptoms | 2. Skin test ± positive |
| 3. Skin test positive | 3. Allergic and/or GI symptoms |
| | 4. ± demonstration of antibodies |
| | 5. Diagnosis by elimination diet and rechallenge |

1. No increase in IgE, antibodies, or positive skin tests
2. Multiple symptoms - may be only behavioral
3. Diagnosis - must use placebo controls

pain or else allergic skin reactions or wheezing. Milk allergy in the infant and toddler is the most common example of delayed-reaction food allergy. This phenomenon is thought to be mediated by lymphocytes. Elevated IgE levels and antibodies to the offending food are inconsistent manifestations and positive skin tests may or may not be seen. A specific mechanism for this type of allergic reaction has never been demonstrated so most experts agree that accurate diagnosis requires amelioration of symptoms following an elimination diet and a return of those symptoms following challenge and rechallenge with the offending food. An elimination diet may produce changes in vague complaints on the basis of suggestion or positive expectation. Therefore, signs and symptoms must be fairly specific or objective for this diagnostic technique to be trusted. This point will be mentioned again in the discussion of food sensitivity.

In contrast to either the immediate or delayed type of food allergy, the symptoms of "food sensitivity" are said to be quite variable and may include only behavior or such vague complaints as fatigue and chronic aches and pains. Food sensitivity is not thought to be mediated by allergic mechanisms. Instead the symptoms are thought to be produced by specific reactions to chemicals contained in food. Such reactions are said to occur only in patients who are susceptible, probably on the basis of inherited biochemical traits.

Since these specific chemical reactions cannot be demonstrated by objective tests, the existence of food sensitivity is very controversial. As in the case of delayed-type food allergy, clinicians attempt to diagnose food sensitivity by demonstrating change in symptoms following an elimination diet plus a return of these same symptoms when the patient is challenged with the suspected food. The problem is that changes in vague complaints and/or purely behavioral symptoms may occur following dietary change due to the nonspecific effects of expectation and suggestion. These nonspecific effects are collectively known as "placebo effects."[2] In order to know whether changes in symptoms are due to nonspecific, placebo effects or to the elimination of a specific chemical, diagnostic procedures must include a placebo control. This means that the patient is given two different diagnostic tests. In one instance the specific food is eliminated. In the second instance a similar dietary change is made, but the specific food is not eliminated (the placebo control). Neither the patient nor the diagnostician should know which diagnostic test is being given. This way neither the patient nor the diagnostician can be influenced by the expectation of change or else the expectation is spread evenly between the two diagnostic tests. In my opinion food sensitivity cannot be accurately diagnosed without employing such placebo controls.

### The Food-Additive-Free Diet

The specific requirements of the food-additive-free diet are outlined in Table 2. Group 1 specifies the fruits and vegetables that must be eliminated on this diet because they supposedly contain salicylates. Recently, three items on this list - oranges, almonds, and strawberries - have been found to contain no appreciable amounts of salicylates.[3] This highlights one of the problems in specifying the food-additive-free diet. Information about the salicylate content of food is based upon old literature and needs to be reviewed using modern day techniques of food analysis. Until that is done these dietary restrictions must be considered tentative. The food items in group 2 are eliminated because, in general, they contain either artificial food colorings or flavorings. This list can only be specified in a general way since the same food item prepared by different manufacturers sometimes contains artificial colorings and flavorings and sometimes does not. All food labels must be carefully checked and, even then, manufacturers must be consulted to determine the exact techniques of preparation for many food items. A review of Table 2 will indicate why the diet is very difficult for most families to follow. Most preprocessed foods must be

eliminated and many commonly consumed foods must be prepared "from scratch." Drinks are a particular problem because of the popularity of manufactured beverages, and because fruit juice substitutes often come from fruits eliminated in group 1. It should be noted that for a family to adhere to this diet requires major changes in shopping habits and in food preparation.

## Research Design

In order to study the theory that hyperactivity and/or learning disabilities are caused by the ingestion of specific food additives, the general effect of dietary change on behavior must be separated from the specific effects of food additives by the use of placebo controls as previously mentioned. One way to provide such placebo controls would be to treat comparable groups of hyperactive or learning disabled children with either the specific food-additive-free diet described in Table 2 or else a contrasting diet (control diet) requiring similar changes in shopping patterns and food preparation but indistinguishable from the food-additive-free diet. It is very difficult to devise this type of contrasting diet. It is reasonably easy to construct a diet requiring similar shopping and food preparation but it is very difficult to disguise the differences between the contrasting diet and the real food-additive-free diet, particularly since this diet has received so much publicity. Still, in a couple of studies an attempt was made to provide a control and an experimental diet. A different approach to the research problem is illustrated in Figure 1. In this type of study the hyperactive or learning disabled children are first treated with the food-additive-free diet making no attempt to disguise the treatment. The assumption is made that a certain precentage of these children will respond favorably to this dietary change but the experimenter, at this stage of the study, cannot tell whether the effect is due to the removal of specific food additives or whether it is due to nonspecific psychological factors. The group that responds favorably is then studied further. While remaining on the food-additive-free diet this group of children is then challenged with a specific food that may contain food additives or else is completely free of such substances. The food item that contains the additives must be indistinguishable from the one that does not. If Dr. Feingold's claims are correct, when challenged with the food containing additives, these diet responsive children should show a deterioration in behavior while those who ate the food free of additives should remain improved. A special food has been manufactured for the purpose of scientifically testing the food-additive-free diet theory. This challenge food contains a mixture of the nine most commonly used food dyes in the American food industry at a dose which is equal to half the average daily consumption of artificial food colorings in the American

**Table 2. — Feingold's Additive-Free Diets Foods to be Eliminated.**

| | | |
|---|---|---|
| Group 1—Natural salicylates | | |
| Fruits— | *Almonds | Grapes & Raisins |
| | Apples | Nectarines |
| | Apricots | *Orange (grapefruit, Lime and Lemon Permitted) |
| | **Berries | Peaches |
| | Cherries | Plums and Prunes |
| | Currents | |
| Vegetables— | Tomatoes | |
| | Cucumbers | |
| Group 2—Artificial colorings and flavorings | | |
| Cereals— | All with artificial colors and flavors | |
| | All instant breakfast food | |
| Bakery Goods— | Manufactured baked goods | |
| | Frozen baked goods | |
| | Most packaged mixes | |
| | Commercial breads permitted except eggbread and whole wheat | |
| Luncheon Meats— | Bologna | Frankfurters |
| | Salami | Meat loaf |
| | **Sausage | |
| | **Ham, bacon and pork | |
| Other Meats and Fish— | All barbecued meats | |
| | Prestuffed poultry | |
| | Frozen precooked fish | |
| Desserts— | Manufactured ice creams, sherbets, etc. | |
| | Powdered puddings | |
| | Flavored yogurt | |
| | Dessert mixes | |
| Candies— | All manufactured types | |
| Beverages— | All soft drinks except 7-up | |
| | Instant breakfast drinks | |
| | Quick-mix powdered drinks | |
| | Canned drinks except pure grapefruit or pineapple juice | |
| | Prepared chocolate milk | |
| Miscellaneous foods— | **Margarine | |
| | **Butter | |
| | Mustard | |
| | Soy sauce | |
| | Commercial chocolate syrup | |
| | Barbecue chips | |
| | Cheeses (except natural, white) | |
| | Cloves | |
| | Catsup | |
| | Chili sauce | |
| Sundries— | Toothpastes and powders | |
| | Mouthwashes | |
| | Cough drops | |
| | Many medicines and vitamins | |
| | Aspirin products | |
| | Perfumes | |

*Note that oranges, almonds and strawberries are free of salicylates according to recent food analysis. See text.
**Check labels.

diet. This challenge food is in the form of a cookie or candy bar disguised with chocolate color and flavor to make the bar that contains food coloring indistinguishable from the one that does not. This challenge material contains artificial food colorings but does not contain either salicylates or artificial flavorings, which means that any conclusions drawn from studies using this challenge material are valid only for the colorings. Most of the adequately designed research studies have employed this type of research design.

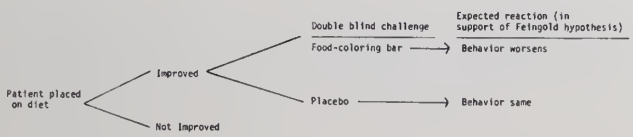
## Summary of Research Findings

Of the studies that have been completed so far, two employed a control diet.[4,5] Combining information from the two studies, a total of 51 school age children and ten preschool children were tested. In both studies some improvement was seen on the food-additive-free diet as compared to the control diet, but only when the additive free diet followed the control diet, and not when the order of these two treatments were reversed. This is known as an order effect and has been noted previously in behavioral research. The explanation for this finding is the subject of controversy but may be due in part to the family's expectations. If only mild changes are seen throughout the experiment, families are likely to interpret the second treatment as the "real treatment" when the first one had relatively little effect. In only one of these two studies was the improvement statistically significant.[4] In this study the control diet was not very adequately disguised. In the other study, where the control diet was fairly cleverly disguised, the only improvement was seen in the preschool children and there only in the parents' responses and not on more objective, but perhaps less sensitive, laboratory tests.

Several well designed challenge studies have been completed, testing a total of about 80 children.[6-11] These studies have yielded the following results: First, several studies have demonstrated that the food-additive-free diet under uncontrolled (open trial) conditions does produce behavioral improvement that can be documented by behavioral questionnaires.[6,7] As mentioned previously, however, at this stage of the study one cannot tell whether the improvement is due to the elimination of food additives or to psychological factors. When these patients have been challenged with artificial food colorings under controlled (double-blind) conditions no deterioration of behavior has been noted. This strongly suggests that the initial behavioral improvement was due to psychological factors (placebo effects) since behavior does not worsen when artificial colorings are added back into the diet. It is not known whether the behavior would deteriorate if salicylates or artificial flavorings were added back also. A third finding was not expected and its significance is still being studied. When the food bar containing artificial food colorings is ingested, some of the studies have demonstrated a very short-lived (lasting one hour) effect that seems to bear no relationship to overall behavior or learning.[6-10] The nature of this effect has not been well described but seems to consist of a transient period of irritability and inattentiveness. This transient response may be the pharmacological effect of a single, large dose of food colorings and, if so, would probably also be detected in normal children. Further work needs to be done to specify the characteristics of this effect, to find out if it is related to the dose of food colorings, and to see if all children, not just hyperactive and learning disabled children, would show this type of response. It is clear, however, that this brief response does not effect the hyperactive or learning disabled child's overall behavior as measured by teachers, parents, or objective evaluations done in the laboratory or classroom.

Figure 1

RESEARCH DESIGN OF CHALLENGE STUDIES




## Remaining Problems

Some problems remain that have not been answered by the studies completed so far. First, the challenge studies have employed only artificial food colorings as the challenge material. Perhaps the expected deterioration in behavior would be seen if the challenge materials also contained salicylates or artificial flavorings. Second, there is still considerable controversy over the issue of the appropriate dose of food colorings and their frequency of administration. Some argue that the dose used in studies so far has been too low based upon an underestimation of the average daily intake of these additives, and that the food containing coloring should be given more frequently to more closely simulate the usual eating pattern of children. Though both arguments have some merit, there are reasonable replies to both criticisms. First, though both salicylates and artificial flavorings should be tested, the artificial food colorings are probably the most important additive excluded in this diet - important because the exclusion of colorings eliminates some of the most popular and most frequently purchased food items. Researchers are justified, therefore, in testing this category of additives

first. The controversy concerning dose of food coloring is based upon different ways of estimating the average intake of colorings in children's diets. One author argues that children ingest more colorings, on the average, than do others in the general population. However, the ingestion of food colorings does not ordinarily occur in one or two large bolus amounts but instead is taken in small amounts spread over time. A dose larger than that contained in the specially manufactured food bar probably represents a very high single dose of food coloring and does not, therefore, mimic the usual pattern of dietary intake. Also, Dr. Feingold frequently says that even one minor dietary infraction usually results in a significant deterioration in behavior. If this is so, the challenge food bar which contains approximately half the total daily intake of food coloring should certainly produce a noticeable effect, but, under controlled conditions, it does not.

Finally, many questions have been raised over the issue of dietary compliance. This is an important issue in the studies that employed a control diet since these studies were aimed at finding out whether any children might respond to the food-additive-free diet. If children do not comply with the diet, any favorable dietary effect would be obscured. However, compliance is not an important issue in the challenge studies since children selected for these studies were already ostensibly diet responsive, which makes compliance irrelevant unless one argues that even greater improvement would be seen with stricter adherence to the diet. Also, in most studies careful diet diaries were kept in an attempt to correlate dietary infractions with behavioral changes but no such correlations could be found, suggesting that compliance with diet is not an important issue.

## Conclusions

It is my conclusion on the basis of the studies done so far that there is no good evidence linking artificial food colorings to the occurrence of the hyperactivity syndrome or minimal brain dysfunction. There does seem to be a pharmacological effect - which is brief and probably of no significance to overall behavior - of food colorings when given in single, large doses. This effect needs to be more clearly described and studied more carefully to see if it is dose related and if it occurs in normal children.

## Recommendations

Given these negative conclusions, what do I tell parents? First, the answer to this question depends on whether the parent is asking me for advice or telling me that they have tried, or want to try, their child on this diet. If they are asking me for advice I give them information much like that contained in this article. If the family is motivated to try this treatment and seems anxious to have my permission, I see no reason to discourage their efforts since the diet is basically nutritious and since favorable, nonspecific psychological effects may be genuinely helpful to some families. The only nutritional concern relates to the intake of vitamin C since most popular vitimin C containing fruits are eliminated from the originally published form of the diet. It is also important to observe if the family continues to pursue other aspects of treatment that may have already been prescribed. For example, if the family tries the diet but also discontinues the child's medication and his or her behavior deteriorates, enthusiasm for the diet may keep the family from noticing the effect of discontinued medication. A third potential problem is that of arguments between parents who are pushing the diet and the child who is resisting. In this situation the child may develop hostile, rebellious attitude that may have a harmful effect on his overall problem. It should be mentioned that this same type of hostile reaction can develop towards medication or psychotherapy as well as dietary treatment.

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# Food Additives

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Widespread public concern regarding food additives stems, in large measure, from the fear resulting from lack of understanding or knowledge. Such lack pertains to information in the following areas:

the chemical nature of all food;

the identity of "food additives";

the historical roles of food additives as ingredients of traditional foods;

failure to differentiate between "adulteration," "contamination," and food additives as desirable, beneficial, components of traditional foods; and

the regulatory controls and safeguards that assure the safety and nutritive value of our food supply through federal, state and local regulatory agencies.

Finally, there abound unrealistic concepts and proposals for the prevention or cure of disease states through simplistic, impractical alterations of food patterns or of food production techniques. Not only are these without scientific validity but they are naively unattainable in today's industrialized, urbanized society.

## Chemical Nature of Food

It is trite to remind us that all components of foods are chemicals: carbohydrates, including a variety of simple sugars; lipids, including fats, fatty acids, sterols, waxes; proteins, amino acids, peptides, and derivatives of amino acids; minerals, ranging from essential ones required in gram quantities to trace substances needed in microgram amounts and others for which a nutrient role is not identified; vitamins and precursors of vitamins; and water. Foods naturally contain substances other than nutrients including naturally occurring emulsifiers, thickeners, buffers, chelating agents, pigments or colors, organic acids, flavors, antioxidants, antimycotic materials.

Completex chemical interactions occur during home processes, as well as industrial ones, of drying of foods, cooking or, indeed, even storage of foodstuffs. During the latter, naturally occurring enzymes frequently alter the chemical composition of the food. For example, the increased ripening of fruits during storage usually generates additional quantities of sugars.

Upon storage and/or heating, the widest variety of chemical changes occur. Examples of these are: the interaction of protein derivatives with simple sugars or the so-called "browning (or Milliard) reaction" responsible in part by the desirable flavor of many cooked meats; alcohol and carbon dioxide may be expelled as in the process of baking of leavened bread; oxidative changes may destroy labile substances including nutrient essentials such as vitamin C or alter colors of ingredients or products such as Tabasco sauce; oxidative and hydrolytic changes in lipids result in rancidity accelerated by heat and other conditions; some types of bacterial actions, such as lactic acid fermentation of milk, inhibit or prevent undesirable bacterial alterations by putrefactive organisms. Such microbial processes include compositional changes, the chemical nature of which changes and the metabolic import of the resultant compounds remain to be fully elaborated.

The unstandardized, uncontrolled variable conditions of home or domestic storage, preservation and preparation result in a less uniform, less identifiable series of changes in the food product than does the defined, controlled conditions of industrial processing.

Modern, sophisticated analytical techniques enable food scientists increasingly to identify and ofttimes quantitate the miniscule trace compounds, organic and inorganic, present in foods and the complex assortment of these responsible for certain desirable properties such as flavor. Mussinan notes that prior to 1939 ten volatile compounds had been identified as constituents of raspberry juice, but that since that time more than 100 additional compounds have been identified and reported.[1] In other studies of blackberry essence, earlier investigators had identified 23 compounds. Modern studies separating the concentrate by column chromatography resulted in 33 fractions, each analyzed separately by GC-Mass spectroscopy. One of these fractions was found to contain 66 compounds not previously identified as a constituent of blackberries. The total number from all 33 fractions far exceeds this.

The numerous important volatile flavor components of foods constitute a wide range of complex alcohols, aldehydes, ketones, acids, esters, amines and other nitrogen-containing compounds, sulfur-containing compounds, oxygen, nitrogen or sulfur heterocyclics, halogenated compounds, cyanides, phenols and so on.[2] Similarly diverse constituents are responsible for numerous other properties of foods such as colors.

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It is of much interest that the so-called artificial flavors frequently are comprised of but 4-10 or so of the dominant naturally occurring flavor-contributing compounds. Such artificial flavors then become "food additives." Indeed, many substances in addition to flavoring agents that have given rise to major controversies when added to foods occur widely in various traditional foods in nature. For example, benzoic acid, coumarin, saffrole, salicylates, caffeine, oxalates, acetic acid, salt, phosphates, various alkaloids, nitrates and, most recently, nitrosamines. Natural foodstuffs contain a wide variety of substances that are not now known to have nutritive value and which, if taken in amounts substantially larger than those encountered in normal usage, may be toxic.[7] Concerning these, Dr. J. M. Coon, Professor of Pharmacology, Thomas Jefferson University, has written; "Viewing all chemicals that are present in our food supply — the natural components, agricultural chemicals, food additives and natural and man-made contaminants in perspective — it is clear that the greatest area of unknown involves the natural and normal components of our foods."

### What Are Food Additives?

The Committee on Food Protection of the National Academy of Sciences has identified food additives as follows:[4]

> In addition to those chemicals that constitute foodstuffs per se, chemicals may be incorporated — either directly or indirectly — during the growing, storage, or processing of foods. These chemicals may be described for convenience as 'food additives.' When they are purposely introduced to aid in processing or to preserve or improve the quality of the product, they are called intentional additives. Such materials as vitamins and minerals for enrichment, mold inhibitors, bactericides, antioxidants, colors, flavors, sweeteners, and emulsifiers are intentional additives. They are added to the food product in carefully controlled amounts during processing, and the amounts necessary to achieve the desired effect are usually very small.

Common types of intentional food additives include acid ingredients, such as potassium acid tartrate, tartaric acid, monocalcium phosphate, sodium bicarbonate, citric acid, lactic acid, malic acid. These are used as acidifying, buffering or neutralizing agents.

Upon storage, wheat flour loses its pale yellow tint, becomes white and undergoes "aging" in a manner to improve its baking qualities. Small amounts of oxidizing agents accelerate this process and reduce storage costs and hazards of spoilage and insect and rodent infestation. These agents include oxides of nitrogen, chlorine dioxide and similar compounds.

Traditionally, sources of lecithin and other naturally occurring emulsifying agents such as egg yolk are used to improve the volume, uniformity and fineness of grain and bakery products, some breads and frozen desserts. Commercially, lecithin and mono- and diglycerides and related compounds similarly are utilized as "additives." Both of the latter occur in large quantities in the gut during digestion of a fat-containing meal.

Traditional as well as so-called artificial flavoring agents have been employed throughout recorded history and the conquests arising from efforts to obtain desired spices and flavoring agents have influenced the course of history. Many of the traditionally utilized spices and condiments are often termed additives.

The limited number of preservatives permitted in foods are added to prevent or inhibit microbial growth. These include sodium diacetate, the propionates of sodium and calcium and such acidic substances such as acetic acid, lactic acid and monocalcium phosphate which are added to baked products to retard the growth of fungi and bacteria which in bread produce "rope," rendering the bread inedible. Similarly, benzoic acid and sodium benzoate inhibit bacterial or fungal growth in oleomargarine, certain fruit juices, pickles and confections. Sugar, salt and vinegar are time-honored preservatives when used in sufficient quantities.

> In addition to the intentional additives, certain other chemicals may find their way into foods as a result of their use in some phase of the production, handling, or processing of food products. They are known as "incidental additives." Under provisions of the federal food and drug laws, such additives are permitted in foods only if they cannot be avoided by invoking good production and processing practices and, then, only if the amounts that occur under these conditions are known to be safe.[4]

### Circumstances Governing Use of Food Additives

National regulatory agencies long have codified the regulation of use of food additives. The first international codification of circumstances governing their use appears to be those elaborated in the first report of the joint FAO/WHO Expert Committee on Food Additives.[8] This Committee was convened in 1956; I was privileged to chair it. This international group formulated general principles concerning the use of food additives and these principles serve, with little modification, as guidelines for national regulatory and advisory groups. For example, the National Academy of Sciences has summarized as follows situations in which food additives are acceptable and those in which they should not be used:[4]

> Several circumstances justify the use of food additives to the advantage of the consumer. Every chemical used in food processing should serve one or more of these purposes:
>
> — improve or maintain nutritional value
>
> — enhance quality
>
> — reduce wastage
>
> — enhance consumer acceptability
>
> — improve keeping quality
>
> — make the food more readily available

— facilitate preparation of the food.

Apart from the question of safety, the use of food additives in some situations is not in the best interests of the consumer and should not be employed when:

— used to disguise faulty or inferior processes

— used to conceal damage, spoilage or other inferiority

— used to deceive the consumer

— otherwise desirable results entail substantial reduction in important nutrients

— the desired effects can be obtained by economical, good manufacturing practices

— used in amounts greater than the minimum necessary to achieve the desired effect.

## Distinction Between "Adulteration," "Contamination" and "Food Additives"

It is evident from the stated situations in which additives should not be used that consumer deception or debasement of product constitutes situations where food additives "should not be employed." The purposes served by acceptable food additives are beneficial and contrast strikingly with the self-serving debasement of products perpetrated by dishonest members of society in all ages prior to the establishment of effective regulatory codes. As these codes have evolved, they have included not only prohibition of adulteration but also have effected the reduction of undesirable or aesthetically objectionable contamination.

British regulations against deception and adulteration originated in the 12th century as controls of weights and measures to prevent deceptive practices and weights involving imported spices. Indeed, this is the origin of the avoirdupois system of weights commonly used for many centuries in English-speaking countries. In early industrialization, adulteration of food and use of even poisonous substances in coloring or disguising inferior foods occurred. These practices were exposed in a classical series of articles that appeared in the medical journal "Lancet" and in the mid-1850's members of the medical profession in Britain gave leadership to subsequent enactment of food regulations.

## Pure Food and Drug Legislation in U.S.

The English experience served to stimulate and accelerate similar interest in the United States, culminating in the passage of the Pure Food and Drug Law of 1906 signed by President Theodore Roosevelt. The campaign for this was led by Dr. Harvey W. Wiley, chemist in the U.S. Department of Agriculture. This law made illegal the transport across state borders of adulterated foods and drugs, the inclusion of poisonous substances in foods or concealing of inferiority. Food and drugs locally produced and consumed were left under local jurisdiction. The Food and Drug Administration ultimately came into being to enforce provisions of the Act of 1906 and subsequent regulatory legislation. This act was drastically revised by the Congress in 1938 in what is known as the Federal Food, Drug and Cosmetic Act which still serves as the basis of food legislation in the U.S. It prohibits adulteration and misleading labeling. Major amendments to the 1938 law include the 1954 Miller Pesticide Act which established procedures for setting safe amounts of residues of pesticides that unavoidably may remain on raw fruits, vegetables and other agricultural products. In 1960 the Color Additive Amendments were enacted covering both synthetic and natural colors. Synthetic colors must be certified, batch by batch, by analyses in the FDA laboratories. Any color additives carcinogenic for man or animals are prohibited by this legislation through what has come to be widely known as the "Delaney Clause." This Clause applies also to other intentional additives.

A Food Additives Amendment to the Food and Drug Cosmetic Act adopted in 1958 requires proof of safety to be furnished by the manufacturer based upon extensive animal tests before a substance may be added to a food. When this Act was passed many substances then used in food processing were widely regarded by scientists as safe although they may not have been subjected to as rigorous experimental animal testing as has increasingly been required since the passage of the 1958 amendment. Numerous of these substances were items traditionally considered ingredients of food and long used without recognized evidence of injury. The Food and Drug Administration surveyed an appreciable body of scientific opinion and developed positions concerning these previously used substances that became classified as "Generally Recognized As Safe" or GRAS. Substances not recognized as GRAS and substances newly introduced since the 1958 Food Additives Amendment cannot be used without safety testing and approval by the Food and Drug Administration.

The scientific community, academic institutions, industry and regulatory agencies repeatedly review and re-examine substances considered GRAS as well as substances that have been approved under existing regulatory requirements. As methods have evolved for detecting new biological phenomena or toxic effects, long used materials are restudied. Where new findings give rise to cautions, further scrutiny of compounds and, in some instances, removal of these from approved lists have occurred. Examples of these include the cyclamates; a number of food colors including most recently, FD & C Red 2 and the currently contested action relating to saccharin. The 1977 revision of the Code of Federal Regulations lists more than 600 substances considered to

be GRAS. The Food Additives Amendment specified that judgments concerning GRAS status would be made by those "qualified by scientific training and experience to evaluate the safety of substances based on scientific data derived from published literature." Promptly the Flavor Extract Manufacturers' Association formed a panel of experts to evaluate the natural and synthetic substances and compounds used as flavoring materials. As of 1978, some 1400 substances were identified, about 800 being included in the Code of Federal Regulations under the title "Synthetic Flavoring Materials and Adjuvants." The use of these substances, not GRAS substances in the strict sense, is administered by FDA as though they are GRAS.

Action by FDA in further evaluation of GRAS substances has not been static. In 1970 they contracted with the Franklin Institute of Philadelphia to search the scientific literature from 1920 and to prepare for FDA bibliographies and abstracts which were in turn sent to several institutions for examination and evaluation, including preparation of literature reviews. The FDA contracted with the National Academy of Sciences to survey the food industry in order to determine levels of use in foods of each of the substances and thereby estimate human daily intakes. Studies were initiated under contract with nongovernment laboratories to assess by special tests such properties as mutagenicity and teratogenicity of many GRAS substances and also contracted with the Federation of American Societies for Experimental Biology (FASEB) to evaluate the information so obtained and to provide FDA with reports on the health aspects of each of the nearly 400 such food ingredients. These evaluations are being conducted by a group of qualified scientists designated as the FASEB Select Committee on GRAS Substances (SCOGS). Reports prepared by SCOGS subsequently serve to guide the Food and Drug Administration in decisions or revisions of positions concerning GRAS substances. By mid-1978 final evaluatory reports on 262 GRAS substances had been submitted to FDA and tentative evaluation reports on 89 others were awaiting completion of hearings or were in the hands of FDA. Tentative reports on 48 remaining GRAS substances were near completion.

It is of considerable interest to note the results of this intensive effort, as summarized by Dr. George W. Irving, Jr., Chairman of the Select Committee on GRAS Substances.[6]

> Of the 351 GRAS substances covered in final or tentative evaluation reports:
>
> Seventy-one percent were found to be without hazard when used in food at current levels or at levels that might reasonably be expected in the future (Conclusion 1).
>
> Fifteen percent were found to be without hazard if use is limited to levels of addition now current (Conclusion 2).
>
> Six percent were found to be without hazard when used in food at current levels, but due to uncertainties in the existing data, specific studies need to be conducted promptly (Conclusion 3).
>
> Four percent were found to exhibit adverse effects when used in food at current levels requiring that safe usage conditions be established (Conclusion 4).
>
> Four percent were found to be unevaluatable due to the inadequacy of available data (Conclusion 5).
>
> FDA has proposed regulatory action on 60 GRAS substances and has taken final regulatory action on 28 others, based in part on the Committee's reports. FDA actions have consistently reflected the conclusions reached in SCOGS reports.

## Other Safeguards

This brief outline of existing regulatory organization and activities is focused on the structure of the Food and Drug Administration. The U.S. Department of Agriculture has similar major regulatory responsibilities for meat and meat products and raw agricultural commodities; the U.S. Treasury Department's Bureau of Firearms and Alcohol has the major responsibility for alcoholic beverages; the newer agency, the Environmental Protection Agency (EPA), has wide-ranging regulatory and tolerance setting activities that pertain to numerous aspects of the environment and include the review and setting of tolerance levels for residues of environmental chemicals, particularly pesticides, in foodstuffs. The enforcement of these tolerances set by EPA becomes the responsibilities of the Food and Drug Administration and/or the U.S. Department of Agriculture.

While these governmental protective controls pertain, the first line of assured compliance lies within the food and agriculture industry itself. Food and animal production is subject to wide monitoring by processors in order to minimize problems of compliance. Control laboratories routinely monitor products to assure compliance.

Where legitimate questions are raised concerning the need for new scientific evaluation of safety of additives, ingredients or residues, industry, government and the academic community share in the support and responsibility for seeking answers to these questions. Major programs of research are currently in progress to obtain new information on a wide variety of long-used additives. These include *inter alia* food colors, a number of flavoring materials, caffeine and related compounds, non-nutritive sweeteners and representatives of all classes of nutrients.

As new scientific evidence accrues, interpretation and extrapolation of its significance for man involve objective assessment of the scientific evidence concerning the nature of any detectable toxicologic effect in properly designed laboratory investigations, the level of intake or the concentration at which such effects become manifest, the relationship of those levels to realistic use levels within the population, and other aspects of the so-

called risk:benefit ratio. Ultimate decisions involve not only scientific judgment but the societal judgment or expression of acceptable risk, societal wants and political expediency. Conflicts that arise, such as the current confrontation regarding saccharin, reflect in varying degrees these several forces involved in decision-making. That this is so is evident from the fact that saccharin, the ban of which is proposed by the Commissioner of the Food and Drug Administration in the United States, is not banned in Canada (although restricted in its distribution) nor in European countries; cyclamates, banned in the U.S. some years ago by the Secretary of HEW, are readily available throughout Europe; FD & C Red 2, used in the United States for some 80 years with no evidence of human injury, was banned by action of the Food and Drug Administration two years ago, and the newly approved FD & C Red 40 has been substituted in large measure for it in the U.S. Based upon the same scientific evidence, the judgment of regulatory agencies in Canada and abroad has been not to approve FD & C Red 40 and to retain use of FD & C Red 2. Such divergent regulatory actions from nation to nation reflect less the scientific evidence and its interpretation than the political and populace pressures brought to bear upon decision makers. Where such pertains, it is highly probably that the scientific evidence of safety is reassuring.

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# Facts and Fictions About Megavitamin Therapy


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**An American physician wrote, "Quackery kills a larger number of U.S. citizens each year than all the diseases it pretends to cure." One might expect that this commentary of the times was written yesterday, but it wasn't. It appeared in an 1861 issue of *National Quarterly Review*. Today, we are still inundated with health misinformation, quackery, gimmicks, Laetriles, and the latest rage—vitamin megadoses. This author emphasizes the hazards of anecdotal health information, self-prescribed vitamin megadoses, and other dubious health claims. Here's an article that sorts the nutritional wheat from the chaff. You may well want to copy it for patients who are confused by the popular press.**



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What do we have to know in order to give our patients intelligent advice when they come to us with what they've read in the lay press or what they heard on a TV talk show? What we have to know is, what vitamins are, what they *can* do and what they *can't* do.

First, the definition of a vitamin. It's an organic molecule not made in the human body and required in small amounts to sustain normal metabolism. Notice that there are three exceptions to this definition. On adequate exposure to sunlight you can make vitamin D in your skin. Of course, D is really a hormone, but that's a different subject. The vitamin niacin can also be synthesized in humans to significant degree from the amino acid, tryptophane, and intestinal bacteria make significant amounts of vitamin K. Crucial to the definition of a vitamin is that lack of it produces a specific deficiency syndrome, and supplying it cures that deficiency.

Vitamins can function in two ways—as vitamins and chemicals. The fat soluble vitamins function as regulators

of specific metabolic activity; the water soluble vitamins function as coenzymes. The fact that they function as coenzymes is fundamental to understanding why the term megavitamin therapy is a misnomer by definition. The vitamin coenzymes come in from food, seek out the cells that need them, are taken into the cell, and combine with a protein already present. The protein is called an apoenzyme. The vitamin coenzyme coming in from outside attaches to the apoenzyme within the cell to form a holoenzyme (or enzyme, for short). It is this which serves the catalytic function that all coenzymes serve. So, it is not the vitamin by itself, but only when combined with its apoenzyme within the cell that it becomes capable of vitamin function. The quantity of apoenzyme any cell can make per unit time is limited, as is the capacity of any cell to make any other protein per unit time. That limited capacity is saturated at levels of vitamin roughly in the range of the recommended dietary allowance (RDA). Since the protein apoenzyme is saturated by a level of vitamin in the range of the RDA, it is obvious that any excess coming in cannot possibly serve a vitamin function. The concept of megavitamin therapy is predicated on total failure to understand the basic biochemical concept just stated.

I mentioned a moment ago that vitamins can also serve chemical functions. That is what they do when present in an excess over and above the amount that can saturate the apoenzyme. The excess will serve whatever function vitamins can perform as chemicals. The most classic example is the reduction action of vitamins C and E. Both can do harm as strong reducing agents when present in excess quantity. Vitamin C being water soluble, will go to areas where the milieu is water, and E, being fat soluble, will go to areas where the milieu is fat. If there are excesses, they will present excessive reducing action in those areas.

### Nutrition—Facts and Fallacies

The key to understanding good nutrition for the layman is very simple. The layman reads a lot of nutritional garbage in some monthly magazines and newspapers which confuses him into thinking that he has to know exactly what vitamin A does, and exactly what magnesium does, so on and so forth. This is all nonsense. The layman doesn't have to know the intricacies of the value of each specific nutrient any more than to be a good driver it's necessary to know how a carburetor functions. One doesn't need to know the machinery of a motor to be a good driver. Running the human machine, also, from a nutritional point of view, is very simple.

Many years ago, the U.S. Department of Agriculture decided the way to simplify nutrition for laymen was to break nutrition down into food groups. They divided the foods in terms of their nutrient content into seven groups. If you ate from those seven groups each day you were guaranteed good nutrition; assuming you didn't have disease, such as intestinal malabsorption. The seven food groups turned out to be a little hard for people to remember, so the USDA reduced it to four basic food groups. These are the basis of nutritional teaching now.[1] All you have to tell your patients, and all they have to know to understand the basics of getting good nutrition for themselves each day, is to take each day foods from the grain group, the milk group, the meat group, and the fruit and vegetable group. At the end of the day the patient should be able to look back and say, "in the course of this day I've had four portions from the grain group (and that includes cereals, breads, pastas, etc.), four portions from the fruit and vegetable group (including one fresh uncooked fruit or vegetable or fruit juice), two to four portions from the milk group (depending on whether it's a child or an adult or a pregnant woman), and two portions from the meat group (and that includes fish and fowl as well as meat). That would automatically include adequate quantities of each of the vitamins and minerals that we know of (though it may be marginal in iron for women in the child-bearing years). Final rule: eat less calories to lose weight; eat more to gain.

That's the totality of what the layman needs to know about good nutrition. Instead he's bombarded with all kinds of ridiculous advice about "natural" foods and other things. There's a good article you should look at by Max Gunther, "The Worst Diet Advice . . . is the kind dispensed on many TV shows" that appeared in the January 11, 1975 *TV Guide*. *The Health Robbers* is another very important book because it is an attempt to tell people how to recognize and avoid health quackery of every description. It contains a chapter by Jean Mayer on obesity quackery, a chapter by William Masters on sex clinic quackery, and a chapter by neurologist Arthur Taub of Yale on quackupuncture (you can guess what that's about). Each chapter is heavily factually documented but nevertheless written in so clear and lucid a way that you can give this reference to your patients as something they can read when they have a question about any dubious health claim. There are about six chapters dealing with the various forms of nutrition misinformation and quackery, including a chapter entitled The Confused (Nutrition) Crusaders, which deals with a number of people and their claims, including Adelle Davis, Carlton Fredericks, the Shute brothers with their vitamin E claims, Cheraskin's *New Hope for Incurable Diseases*, and Linus Pauling. You may recall that Adelle Davis took the position that if you followed her nutrition advice you would never get cancer. She doesn't give that advice anymore, since she died of cancer. *The Health Robbers* is so important that it was

the first book ever reviewed by *Consumers Reports*.[2] I urge you to have a copy on your bookshelf. It's not widely available; you can get it from the publisher.[3] I must make a disclaimer at this point. Although I wrote a chapter (The Health Hustlers: How to Spot a Food Quack), neither I nor any of the other chapter authors get royalties. As indicated at the beginning of the book, the royalties go to the Lehigh Valley Committee Against Health Fraud, Inc., a major organization fighting quackery of all types in the health field. There's also a chapter by Tom Jukes[4] on the "organic" rip-off, pointing out the misinformation in natural food teachings, and noting the New York State public hearings on organic foods. The Director of the New York State Food Laboratory reported more products labeled "organic," and purchased at health food stores, contained pesticide residues than foods not labeled organic (30% vs 20%).

There is *no* need for added vitamins when eating a well-balanced diet. There are some who believe in "nutritional insurance," that is, taking a capsule a day containing the RDA of the major vitamins. I have no quarrel with that. I think it's totally unnecessary, but if it makes someone feel better he or she is only out a couple of cents a day, and not the greater amounts that one spends if one follows the advice of *Prevention Magazine* and the National Health Federation.

It's been alleged that megadoses of vitamins are harmless. This is *not* true. Generally speaking, the literature shows that at doses about 10 times the RDA, we start to see toxic effects. So, as a general rule, a megadose is 10 times the RDA or more. There's an increasing body of evidence of various forms of harm resulting from megadoses of various nutrients. Those of you who follow the *Annals of Internal Medicine* may recall the 1976 report that megadoses of vitamin C raise the urine uric acid level and may precipitate gout in people so predisposed. Another harm is that although most of us catabolize ascorbid acid (vitamin C) fairly rapidly past the oxalic acid stage and excrete it in our urine, some (possibly about one out of fifteen) have a congenital defect whereby they can't get ascorbate past the oxalic acid stage readily, and those people will have an increased susceptibility to oxalate kidney stones. When I talked on this subject at Columbia U. it turned out that one of the medical students had just had an attack of renal colic due to a kidney stone after seven weeks of following his mother's advice to take a gram of C each morning prior to breakfast.

What are other undesirable side-effects of megadoses of C? Rebound scurvy is a particularly dangerous one when it occurs in a newborn. This was reported from Nova Scotia some years ago. The RDA for C is 45 mg a day (except for pregnant women in whom it's 60 and lactating women in whom it's 80). 450 mg of C a day would be a megadose. If a pregnant woman is taking a megadose of C, her body's machinery for destroying the C is speeded up in order to get rid of all that excess reducing capacity. That speeded up machinery will now destroy C, hypothetically, let's say, 10 times as fast as normal. The fetus acquires the same speeded up machinery to get rid of the transplacentally-passed ascorbate. Hence, the newborn is born with a C-destructive machinery 10 times normal, but is getting normal C from mother's milk, which it destroys with 10 times normal speed. Therefore, the newborn runs out of C and gets scurvy with dangerous life-threatening bleeding. This is clearly an undesirable side-effect. It has also been reported in adults who stop megadoses of C "cold turkey" rather than tapering off over a period of, let's say, about 10% a day or 20% every other day. In adults it's been reported to produce bleeding into the gums and skin, loosening of the teeth, roughening of the skin (i.e., the stigmata of scurvy).

## Vitamin C Megadoses—Thumbs Down

About 13% of American Blacks and even a larger percentage of Sephardic Jews, Orientals, and certain other ethnic groups have congenital glucose 6-phosphate dehydrogenase (G6-PD) deficiency, which is activated into hemolytic anemia by a strong reducing agent. In the March 1977 issue of *Blood* there is a paper describing the severe hemolysis produced by megadoses of C. In that article, the authors reflect on a patient who died from a megadose of C with its accompanying severe hemolysis. A similar phenomenon was reported from Montefiore Hospital in the Bronx in a patient with sickle cell disease. This is biochemically logical because it is reduced sickle hemoglobin which takes the sickle shape and clogs capillaries. If you give a megadose of C to a patient with SS hemoglobin you're going to convert his oxidized SS hemoglobin to reduced SS hemoglobin. It's going to take the sickle shape, and that patient can go into a severe sickle crisis.

Where else is mega-C dangerous? When diabetics check their urine, two of their favorite tests are the Testape® test and the Clinitest.® Megadoses of C cause the Testape test to be falsely negative and the Clinitest to be falsely positive. Now, if the patient doesn't know that and if he doesn't inform his physician, the physician won't know that the patient is getting false-positive or false-negative test results, and that patient runs the risk of either diabetic ketoacidosis or insulin shock. Also, it has recently been reported that the strong reducing action of megadose of C cause tests for blood in the stool to be falsely negative. If you suspect a patient has a carcinoma of the colon and you do three stool guaiacs and they're all negative, it may be because the patient is one of the

almost two million people in the United States taking megadoses of C. Your clinical suspicion of a carcinoma of the colon may be correct, but the negative stool tests may throw you off the track.

Where else is mega-C harmful? In our own research unit, we've been studying the effect of megadoses of C on vitamin $B^{12}$ in food, in the bile, and in body stores. We found that mega-C, when added to a typical VA Hospital diet, could destroy 50% to 95% of the $B_{12}$ in the diet. A group from the pharmaceutical firm which sells most of the C in the U.S. has taken issue with that. You can read the latest colloquy between them and us in the March 1977 issue of the *American Journal of Clinical Nutrition*. You can prevent the destruction of $B_{12}$ by megadoses of C if you introduce the appropriate amount of iron, whose redox potential will antagonize the reducing action of C on the $B_{12}$ The same happens when you eat a meal. If the quantity of redox agents such as iron is appropriate, then a megadose of C will not harm the $B_{12}$ in that meal. If it's not appropriate it may. We'll see where that dispute goes in the next year or two. Our latest research on the subject just appeared in the February 1978 *American Journal of Clinical Nutrition.*

### C and the Common Cold

It's been alleged that vitamin C prevents colds. As it happens there's absolutely no evidence for that. If you look in the 1974 Congressional Record you'll see a Chicago radio station colloquy between Linus Pauling and Victor Herbert in which Linus Pauling admits that there's no evidence that vitamin C *prevents* colds. However, he did then, and continues to hew to the line that C reduces the symptoms of colds by about a third. If you look at the *evidence* on the reduction of cold symptoms you'll find it's largely subjective.

This is an area where much trouble arises in informing the public about nutrition. The public is unable to tell the difference between anecdote and science. When Carlton Fredericks, for example, whose doctorate is not in nutrition, makes an allegation on the basis of anecdotal evidence that sugar is bad for you, or that megadoses of C are good for you, this to the layman is just as good evidence and just as important as scientific data in a medical journal. This is a fundamental flaw in the logic of the layman, and the fundamental difference between the layman and the trained scientist or trained physician who learns that anecdote is not reality. Reality is what you can objectively ascertain and not what somebody said. If you look at the objective data regarding vitamin C and the common cold, you'll find that in late 1976 in the *New England Journal of Medicine* the same group that two years earlier reported that megadoses of C reduced colds in Navajo children report that they were wrong the first time. When they did the study the proper way, with proper controls, they found out that megadoses of C *did not* reduce the symptoms of colds. Anderson's group in Canada divided over 2,000 patients into eight groups: six got megadoses of C and two got placebos. Guess which group had the least colds? One of the two placebo groups. So, there is really little evidence that C has any value versus colds. There is some slight evidence it may have a mild antihistaminic effect. If we take that claim at its most favorable possibility, is it worthwhile to take a megadose of C 365 days a year, with the possible undesirable side-effects, in order to achieve a mild antihistaminic effect during the eight days out of the entire year that the average person has a cold? It makes no sense to me. Anecdotal and testimonial evidence is as worthless in medicine as it is in law, where it is excluded from courts as hearsay (see my article citing the pertinent medical quackery cases in the November 18, 1977 issue of *Science*).

### No Value for Schizophrenia

What about megavitamin therapy for schizophrenia? This is heavily pushed and *completely anecdotal*. There is no scientific study demonstrating that megavitamin therapy has any value in schizophrenia. If you want facts look at the official report of the American Psychiatric Association Task Force on Vitamin Therapy in Psychiatry. They convened a group of experts who went over the various reports of the proponents of megavitamin therapy and ascertained that they were all anecdotal. There was not a single scientific controlled study showing any value. That report was published in 1973, you can get a copy of it from the American Psychiatric Association in Washington, D.C. Linus Pauling was upset by that report and the American Journal of Psychiatry published his views on orthomolecular psychiatry in the November 1974 issue. I urge you to read not only this eloquent argument by a brilliant man, but also the three papers immediately following the Pauling paper, which completely devastate that argument.

What about the undesirable side-effects of the large doses of nicotinic acid and nicotinamide used by the promoters of orthomolecular psychiatry? These undesirable side-effects begin with frequent mild ones like flushing and itching, and go on to liver damage with hyperbilirubinemia and jaundice, and many other abnormalities, including severe dermatoses, elevated serum glucose and serum uric acid levels, and elevated concentrations in the serum of enzymes which arise from the liver (and are associated with liver damage), as well as peptic ulceration. As you may know, a large national study of the use of megadoses of niacin was completed which notes the chemical effect of lowering serum lipid levels on the survival of men who've had heart attacks.[5] This study showed absolutely no value with respect to

mortality if one takes megadoses of niacin to lower serum lipid levels. What it did show was that the megadoses of niacin produced an increased frequency of cardiac arrhythmias, gastrointestinal problems, and abnormal blood chemistry findings.

We know that if you lower the serum level of lipid or vitamin or anything else, it does not necessarily mean that the tissue level is lowered. Therefore it does not necessarily have any clinical value. Clinical value is determined by what happens in the cells, not by what happens in the serum. If, for example, an agent lowers the serum lipid level by driving the lipid into the coronary arteries, that's not a good thing. Lowering the serum level by itself, unless you know what it means in terms of the tissue level and the intracellular level in the shock organs, may have no meaning or a bad meaning instead of a good one.

### The Truth About Vitamin E

Let's turn now to vitamin E, so heavily touted as the sex tonic of the age. Is it true? As you can guess, it is not. Not much has been done yet to determine whether massive doses of E are toxic, but there is a fair amount of literature beginning to develop on it.[6] We're not even sure E is a vitamin. We know that its role in humans is in helping in the metabolism of polyunsaturated fatty acids (PUFA), and we know that premature infants may have a tendency to increased red cell hemolysis which can be corrected by adding vitamin E. Does that mean they have E deficiency? Hematologists know that when an anemia responds to a given nutrient or a given agent, it doesn't necessarily mean the patient was suffering from a deficiency of that agent. Just because pneumococcal pneumonia responds to penicillin doesn't mean it's due to penicillin deficiency. The fact that the hemolysis of premature infants responds to vitamin E turns out, in a study reported by Oski and his associates in the *New England Journal of Medicine* to be due to the fact that premature infants invariably are given large amounts of iron supplement. This strong redox action of the iron in association with the PUFA in their diets brings about the weakening of the red cell membrane and increased susceptibility to hemolysis, especially *in vitro* in the presence of peroxide. Instead of adding a reducing agent such as E, simply reduce the amount of iron supplement in their diet. The problem goes away just as it does by giving them megadoses of E (or by itself by waiting three months).

The allegations of vitamin E as a sex-vitamin go back to the original study in the early '20s which first isolated vitamin E. This was a study in rats in which all fat was extracted from the diet and most of the fat was put back, except one fraction. That fraction happened to be the one containing the subsequently isolated vitamin E. It was found that these rats became generally weak, suffering from generalized malaise and debility, (including debility in sexual function), and when this fraction that was deleted was added back, they became normal again, including normal sexual function. That's the basis for the anecdotal allegations that vitamin E increases sexual potency in humans. It's almost impossible in the U.S. to get a vitamin E deficiency unless you're suffering from intestinal malabsorption, in which case your patients shouldn't be dosing themselves with megadoses of E to the exclusion of medical care. Even if you put a patient on a no-E diet, as Horwitt did for years, or even if you have a patient with generalized intestinal malabsorption (such that he's unable to absorb fats and therefore has reduced absorption of the fat soluble vitamins like E), after years of such a situation you don't see any clinical disease. All you see is an increased susceptibility of the red cells to hemolysis when exposed to $H^2O^2$, (hydrogen peroxide) and if you do a proctosigmoidoscopic exam you'll see some ceroid pigment in the colon.

What are the undesirable side-effects of megadoses of E? The ones reported so far include headaches, nausea, fatigue, dizziness, and blurred vision. Blurred vision is particularly interesting because E in large doses antagonizes vitamin A, and that may be the mechanism whereby the blurred vision occurs. The only report in the literature relating to human gonad function is that megadoses of E may *decrease* function, contrary to the allegations of the promoters of E that it *enhances* it. Megadoses of E also have undesirable effects in the skin and mucous membranes, including inflammation of the mouth, chapping of the lips, GI disturbances, muscle weakness, low blood sugar, increased bleeding tendencies, and degenerative changes.

It is interesting to note that one of the early advocates of vitamin E as a preventive of heart attacks recently had a heart attack himself and had a triple coronary bypass operation.

### What We Know About $B_{12}$

There are vitamins whose toxicity in megadoses has not yet been clearly established. For example, vitamin $B_{12}$ There's been only one case so far of so-called allergy to vitamin $B_{12}$ and we're not sure whether it's real or related to a preservative in the $B_{12}$ preparation. $B_{12}$ is, of course, a favorite "remedy." Because of its nice color, it looks potent and people think it's potent. The fact is, every objective study demonstrates that $B_{12}$ is not an appetite stimulant and any such effect is that of a placebo. Contrary to the allegations that $B_{12}$ helps various neurologic disorders, it has absolutely no value in any neurologic disorder other than that due to $B_{12}$ deficiency, where a low serum $B_{12}$ level gives you the diagnosis. There is one possible exception—tobacco amblyopia.

Since some ophthalmologists insist that there's no such thing as tobacco ambylopia, it's hard to work out exactly what's going on there. $B_{12}$ in the hydroxo form does bind cyanide, and it's been alleged that it's the cyanide in tobacco smoke that produces tobacco ambylopia (if in fact, it does exist). There may be a rational tie here, because $B_{12}$, in the hydroxocobalamin form will bind cyanide and will itself then be converted to cyanocobalamin. There are certain foods which are very high in cyanogens (cyanide generating substances), such as cassava in Africa, where huge populations all suffer from chronic cyanide poisoning because of the daily ingestion of cassava. It's been alleged that this type of poisoning can be reduced with injections of hydroxocobalamin.

### The Laetrile Fraud

It's interesting that a cyanogen right now is very popular in the U.S. That cyanogen is, of course, Laetrile, which is currently the most popular form of quackery in this country. This quack cure for cancer is promoted under the guise that it is a vitamin ($B_{17}$) which it is not. Vitamin $B_{17}$ is a *trade name* created for it by its promoters; there is currently no law preventing promoters from trade-naming cyanide as vitamin $B_{17}$, or arsenic as vitamin $B_{18}$, for that matter. The *scientific* designation of substance as a vitamin, on the other hand, requires that it conform to the dictionary definition of the word. It has been alleged (with no evidence), that it cures cancer by destroying cancer cells because of the cyanide it releases. Study of the cyanide released by Laetrile shows that the cyanide, as you would expect, diffuses throughout the body and does not home in on cancer cells or any other cells. If the dose used releases enough cyanide to be toxic to cells it will kill the host, as we know from a report in June 1977 from Buffalo, New York, of the ten month old girl who took her father's Laetrile pills and died of cyanide poisoning. Laetrile has been studied at many places and found to be fraudulent. The Merck Index says Laetrile (under its chemical name, amygdalin) is a poison which has been falsely promoted as a cancer cure since 1840. These facts have been in the Merck Index, available in every hospital and pharmacy in the country, since it was first published in 1889. Laetrile is a trade name for amygdalin. It is 2 parts glucose, 1 part benzaldchyde, 1 part cyanide, and no parts vitamin. There is also a synthetic Laetrile®, which is 1 part glucose, 1 part benzaldchyde, 1 part cyanide, no parts vitamin, and mutagenic by Ames test. Low grade cyanide poisoning occurs in nearly every patient taking Laetrile. See the Merck Index listing for "hydrogen cyanide" for the symptoms of low grade cyanide poisoning (nausea, vomiting, diarrhea, hypotension, progressively increasing weakness, etc.). Only one of these symptoms may appear at any one time.

We do know that if a cancer patient takes Laetrile instead of undergoing curative therapy, that patient will die. This has been reported in a number of diseases, particularly Hodgkin's, where we now know we can cure stages I through III. If a patient with stage I through III Hodgkin's is talked out of chemotherapy and radiation, (which is now believed to be curative), and gets Laetrile instead, that patient will die of Hodgkin's—that death, in my view, is murder. There is precedent for calling it murder, and there is precedent for convicting such people of murder. Let me give you that precedent. It's on page 2 of the book, *The Health Robbers*, and it's the case of a little girl who had been scheduled for surgery to remove a tumor from her left eye. Her doctors thought cure was possible because the tumor had not spread. Shortly before the operation, in the hospital waiting room, her parents met a couple who told them how a chiropractor had cured their son's brain tumor without surgery. Mrs. Epping phoned the chiropractor and informed him of her daughter's diagnosis. Without ever seeing the child, the chiropractor replied, yes, he could help by chemically balancing her body. Elated by this promise, the parents removed their daughter from the hospital, refused the surgery which would have enucleated the eye (but saved the child), and the chiropractor treated her with vitamins and food supplements. (You should know that the promoters of Laetrile call it a food supplement, and they're trying to get a bill through Congress forbidding the FDA from asserting any authority over food supplements.) Despite the new treatment with food supplements, the tumor grew quickly, became tennis ball size, and pushed her eye out of its socket, so that there was no longer any hope that surgery could save her. She died within a few months. The Assistant DA for Los Angeles County was incensed and indicted the chiropractor for murder. He was convicted of second degree murder and sentenced to prison. I predict that we will see similar things happening to some of the promoters of Laetrile. Those who promote Laetrile point out that cyanocobalamin also contains cyanide; they neglect the fact that an average dose contains one million times as much cyanide as an average dose of cyanocobalamin.

Let's come back to the harmful effects of megadoses of some other nutrients. $B_6$ in megadoses used to be believed to be harmless, but now that megadoses are being used more frequently, there's evidence that large doses may produce liver disease. It's been established in rats and there is a study under way in humans.

Megadoses of folate also used to be considered harmless, but it's been established that large doses antagonize the protective effect of dilantin against convulsions in patients with epilepsy. Patients with epilepsy who take dilantin, and who've been free of

convulsions for years because of the dilantin, can be thrown into convulsions with a megadose of folate. This was reported by Butterworth's group in the *American Journal of Clinical Nutrition.*

### Pangamic Acid ("Vitamin $B_{15}$")

According to both the American Food and Drug Administration and the Canadian Food and Drug Directorate, this substance has no known values for humans, and may be harmful. The FDA is pursuing a number of court actions against Pangamate purveyors.

It was reported in that eminent medical journal, *The National Enquirer*, that Linus Pauling and Cameron working at a great international medical research center in Scotland (which turns out to be a modest regional hospital in the Scottish Highlands), found that megadoses of vitamin C increase survival of terminal cancer patients four-fold. This was published in the *Proceedings of the National Academy of Science*, a prestigious journal. You have to realize, however, that the basic criterion for getting something published in this journal is to be a member of the Academy. In fact, what was being described, in my view and in the view of a number of cancer experts, is the placebo effect. The fact that these patients lived an average of eight months instead of an average of two months, is simply due to the fact that the patients were in the hands of enthusiastic doctors who felt that they could help. This is true at every cancer center in the United States. Put a patient in Sloan-Kettering or in Roswell Park or in MD Anderson, and that patient is going to live longer. The hope of the patient, and the fact that the doctor is interested in the patient makes a tremendous difference; this relates to the placebo effect,[7], which we'll come back to in a moment. First, I want to refer you to a study on megadoses of C in cancer which goes the other way. This is a report in *Nature* in 1976 by a group at the University of Vancouver in British Columbia, who found that megadoses of C may have mutagenic effects and induce neoplasia.

### The Placebo Effect

Let's touch now on the placebo effect. This is very strong and very real. Lay persons do not usually understand that placebos not only work when the illness is just emotional, but also in remitting real symptoms of real disease. If the patient believes he will be helped, he often will. This is crucial to remember. If you go back to the famous World War II study of Beecher, the professor of anesthesiology at Harvard who devoted a great deal of his life to studying placebo therapy and to studying medical ethics, you'll recall that he observed with his associates that 68% of soldiers with severe battlefield injuries needed no morphine for pain relief, whereas 83% of civilians with the same type of injury did need morphine. This is the placebo effect. Beecher has stated that the placebo effect is a powerful therapeutic tool "on the average about one-half to two-thirds as powerful as morphine in the usual dose in relieving severe pain." If both the doctor and the patient believe something will relieve a symptom, it often will. Those of you who took psychosomatic medicine know from the statistics in that field that 80% of symptoms with which patients present when they first see a doctor will go away without treatment. Four out of five times, whatever you do or don't do, including what you add to or subtract from the patient's diet, is going to be associated with complete relief of the symptom even though in four out of five instances that symptom is going to go away with no treatment.

The possibility that placebo effect may be mediated by endorphin release deserves study, since any mind-body interaction in relation to pain may well involve these endogenous painkillers.

There's nothing wrong with giving a patient vitamin $B_{12}$ or something else as a placebo, provided you know what you're doing, and provided you continue to observe the patient to ascertain whether there's some underlying disease causing the subjective complaint—and then deal with that underlying disease. Using placebo therapy without knowing what you're doing is quackery. Using placebo therapy when you know what you're doing and when you're observing the patient for real disease, is appropriate.

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# Miami Multiple Risk Factor Intervention Trial (MRFIT) An Experiment in Coronary Heart Disease Prevention in High Risk Men Age 35-57

## Preliminary Report

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In 1971 a Task Force on Atherosclerosis appointed by the National Heart and Lung Institute recommended the development and support of a preventive trial in men with multiple coronary heart disease risk factors.[1] Previous studies in the United States and abroad have shown that elevated serum cholesterol, hypertension and cigarette smoking are clearly associated with a high incidence of coronary disease.[2] The Multiple Risk Factor Intervention Trial (MRFIT) was therefore initiated to test the hypothesis that significant reduction of these three key variables through an intervention program would be associated with decreased morbidity and mortality from coronary heart disease. From 1972 to 1974, 20 clinical centers were selected to participate.[3] The Dade County Department of Public Health in Miami was one of these centers and the only county health department to be included in the national program. In 1976 the Miami MRFIT also became associated with the Nutrition Division of the University of Miami School of Medicine's Department of Epidemiology and Public Health.

The program office for MRFIT is at the National Heart, Lung and Blood Institute (NHLBI) in Bethesda, Maryland. The Coordinating Center is located at the University of Minnesota. This Center collects data and periodically distributes reports concerning changes in risk factor status of the participants of all clinics. Clinical end points of myocardial infarction, angina, intermittent claudication and disability or death from any cause are not published. The Central Laboratory, monitored by the Center for Disease Control in Atlanta, is at the Institute for Medical Sciences in San Francisco. Cassett tapes of electrocardiograms of all MRFIT participants are read by computer at Dalhousie University in Nova Scotia.

The administration of national MRFIT includes a Steering Committee composed of one or more investigators from each center and representatives from NHLBI. There are a number of special committees which report to the Steering Committee. They are Design and Analysis, Quality Control, Publication and Presentation, Intervention, and the Executive Committees. A Policy Advisory Board of prominent biomedical scientists monitors the scientific and operational aspects of study. The MRFIT includes a truly multidisciplinary staff of physicians, psychologists, epidemiologists, biochemists, nutritionists, nurses, health counselors, technicians, and administrative and clerical personnel. All are working together closely to meet the research objectives of the six year intervention effort. Periodic regional and national meetings are held for all staff involved in the intervention program to enhance these efforts.

### MRFIT Screening and Admission Criteria

By November 1, 1975, 370,599 men age 35 to 57 across the country had participated in the first screening visit and from these 12,866 were ultimately selected.

Eligibility for second screen was based on a combination of risk factors placing the candidate in the upper 10-15% of coronary heart disease risk according to

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criteria established from experience in the Framingham Study.[4] Individuals with a diastolic blood pressure level in excess of 114 mm Hg, serum cholesterol over 349 mg/dl, history of heart disease or treatment for diabetes mellitus were excluded from the study. Of all men initially screened, 29% had diastolic pressures of 90 mm Hg or greater, 15 % had a serum cholesterol level of 260 mg/dl or greater, and 37% smoked cigarettes. The "average" MRFIT man, based on data for all 20 centers, was age 46.7, weighed 189 pounds, had a first screen serum cholesterol level of 254 mg/dl and a diastolic pressure of 99 mm Hg. His forced vital capacity was 3,699 cc with a one-second forced volume of 2,966 cc. Sixty four percent smoked an average of 36.7 cigarettes a day.[5]

Extensive histories of socioeconomic background, dietary habits, physical activity and personality traits were obtained. Eight centers administered the Roseman-Friedman Interview for Type A Coronary Prone Behavior.

At the second and third screening visits, each participant received a physical examination, pulmonary function test, electrocardiogram and blood studies. A treadmill exercise stress ECG test was performed at the third screen; however, no one was excluded on the basis of the results. A candidate free of clinical coronary heart disease or other major illness who expressed willingness to cooperate in the six-year MRFIT study was invited to participate. At the second and third screening visits all individuals were informed that if they joined MRFIT, they would be randomly assigned to either the "usual care" (UC) group or the special intervention (SI) group. The UC participant is examined by MRFIT annually but referred to his usual source of health care for control of risk factors. The SI participant visits a MRFIT center at least every four months for risk factor reversal. The coordinating center sends a schedule of code number names and dates for the annual physical examinations of each participant with a "window" of two months on either side of the randomization anniversary. Copies of all electrocardiograms and laboratory results from annual examinations are sent to each private physician, if the participant grants permission to send these records.

At the Miami Center 11,613 men of varied demographic background were screened; 414 were randomized, half to the UC and half to the SI group. The number of men at the Miami Center has continued to increase as participants from northern cities move to Florida and are transferred here for follow-up.

## Psychosocial Characteristics of Special Intervention Men

The Miami MRFIT Center has a heterogenous study population derived from a screening program which included such diverse sites as public utilities, electronic corporations and unemployment lines. Seventy-four percent of the participants are white, 5% are black, while 21% are white with Spanish surnames. Less than half those with Spanish surnames are facile in English. The economic and educational status of the SI men at the Miami Center is summarized in Table 1.

At the second annual examination 41% of the SI men reported having a physician to whom their results would be forwarded. Forty-three percent reported having a physician at entry into the study. Forty-five percent scored low on the Knutsen's scale for assessing self-esteem; 33% had high coronary prone behavior (Type A) scores as measured by the Jenkins Activity Survey.[6] Forty-three percent reported having five or more significant life events (divorce, serious job or family incidents, etc.) during the 12 months prior to entry into the program.

## Intensive Intervention Program

The initial Intervention Program formally began at the third screening visit immediately following the randomization process. At that time all SI men received a MRFIT Participant Guide, a "Weight Control Message" and an opportunity to briefly discuss their risk factors with a physician. Smokers heard a special "Smoking Message" from one of our physicians immediately following the treadmill test. Each SI participant was assigned to either a nutritionist or smoking specialist, depending on his risk factor status. The participant and his specialist set goals related to serum cholesterol reduction or smoking cessation such as "cold turkey" cessation of smoking and limiting eggs to two weekly. Participants who had a diastolic blood pressure of 90 mm Hg and above or who were taking antihypertensive medication were scheduled to return to the Miami MRFIT Center within four weeks for a hypertension confirmation visit.

Initially, ten consecutive weekly group meetings comprised the Intensive Intervention Program. Groups of five to nine men and their wives convened at the Miami

**Table 1. — Income and Educational Level of Miami MRFIT Special Intervention Men.**

| Income from Job | Percent SI Men | Education Level | Percent SI Men |
|---|---|---|---|
| $10,000 | 24 | Less than high school graduate | 24 |
| $10,000-$14,999 | 33 | High school graduate or high school plus trade or business school | 31 |
| $15,000-$22,999 | 28 | Some college or bachelor degree | 34 |
| $22,999 | 14 | Graduate or professional education, or graduate or professional degree | 11 |

MRFIT Center. Seventy-three percent of the SI men attended group sessions. The sessions included (1) educational films, slides and talks which described the relationship between risk factors and coronary heart disease, and (2) discussions and practical experience related to the methods of lowering risk factors. The small group format allowed for some of the characteristics found in self-help groups such as testimonials, role models, peer pressure, competition, group support and practical lay suggestions. The group meetings were conducted by a three member intervention team composed of a health counselor, smoking specialist and nutritionist. The ten sessions began with orientation in which the group leader described the risk factor profiles of the men in attendance. The participants were shown the theoretical reduction in risk of having a myocardial infarction if a fictitious man having the mean values of the group's risk factors were to stop smoking, lower his cholesterol 10% and reduce his diastolic blood pressure to 80 mm Hg.

During the first five sessions participants had the opportunity to describe their reasons for coming to MRFIT, changes they had made during the week and problems they were having making the desired changes. Group leaders acted as facilitators for these discussions with specific responsibility for maximizing the chances that changes in health related behaviors would follow each meeting.

Role playing in a cafeteria or restaurant scene also provided opportunity for participants to practice assertive behavior such as inquiring about the type of margarine the restaurant offered. A mock-up grocery store allowed the participants to practice choosing foods and reading nutrition information on labels in a situation where they could receive immediate feedback from the staff. Food models were used to help participants learn to estimate the amounts of food they eat. Participants also learned to use a special Brand Name Grocery Guide which provided the information required to shop according to MRFIT guidelines.

Each group had one session devoted to hypertension in which the film "What Goes Up" (American Heart Association) was shown. The meeting was conducted by the group's Health Counselor and a MRFIT physician. An important part of the hypertension session was the question and answer period that followed the movie. Hypertension visits were held prior to group meetings between 5:00 and 7:00 p.m. The group's health counselor and a physician conducted these visits.

Although certain information was communicated to all groups, the specific programs and emphases were tailored to the risk factor profile, particular needs and the week-to-week progress of each group. Prior to the group meetings held from 7:00 to 9:00 p.m., private counseling evening sessions were conducted by the nutritionist and smoking specialist.

Four month follow-up visits are generally conducted in the evening for each intervention group. At follow-up visits, new risk factor reduction goals and strategies are proposed to the participant and an assessment is made of the participant's motivation in the relevant risk factor areas. About four weeks later when the results of tests are available, the group reconvenes for discussion of its progress and future intervention plans.

At the end of each annual examination, the primary counselor reviews the life events check list which was filled out by the participant. This gives the counselor an opportunity to probe into the events and their possible influence on the risk factor status of the participant. In addition, the counselor sets up the appointment for the annual medical conference held four weeks after the annual physical examination. This is a special meeting in which the MRFIT physician reviews the progress of the participant from his first visit to the present. The half hour conference includes a review of the participant's current risk factor status, an assessment of his motivation, opportunity for the participant and spouse to ask questions relative to his intervention progress, and a modification of the participant's current risk reversal program or initiation of a new program. Nearly 90% of the SI men who attend the annual physical examination return for an annual medical conference.

## Recent Intervention Efforts

Following the tenth intervention session, each participant was paired with a primary counselor, health counselor, nutritionist, or smoking specialist, depending on his particular risk factor status. Further intervention was then carried out through individual counseling, either at the clinical center, via mail or telephone, or through special groups which met at the Center. The number of intervention contacts following the intensive intervention phase was determined by the participant's risk factor status and motivation level.

In approaching the intervention for smokers, we have used One-Step-at-a-Time Smoking withdrawal system filters by Water Pik, stress management and relaxation groups. A campaign was also initiated to encourage "hard core" smokers to avoid cigarettes for as many hours as possible during the American Cancer Society's "Great American Smoke Out."

Nutrition intervention modalities have included (1) application of behavior modification techniques, (2) continued cholesterol and weight reduction efforts for both individuals and groups, (3) "shape-up" exercise and weight reduction groups, (4) food give-a-ways to men who increase their intake of fish, (5) ladies' groups which maintain interest of the wives in the program, and (6) a 26

consecutive weekly phone call program to discuss weight and cigarette status. Other specific clinic events such as group reunions, holiday open houses and food demonstrations are used as educational experiences. These also serve to motivate and sustain a sense of comradeship among participants. A participant oriented newsletter called "The Beat Goes On" is published for the SI group to convey news about Miami SI participants and the Miami Center.

## Risk Factor Intervention Modalities and Preliminary Results

1. Nutritional Program

The MRFIT Basic Eating Pattern embodies the most recent and applicable information from previous studies directed toward lowering serum cholesterol through dietary measures alone. It is an eating style based upon rational food choices in keeping with the free-living status of the participants. The primary goals are to lower intake of dietary saturated fat and cholesterol while increasing the intake of polyunsaturated fats. Moderation in total calories and a varied intake of whole grain cereals, low-fat dairy products, vegetables, legumes, and fruits are also included in the nutritional program.

Approximately 35% of calories are derived from fat, 8% from saturated fat, 10% from polyunsaturated fat and not more than 250 mg of dietary cholesterol is permitted. The portion size of meat is limited to 6 ounces. Leaner cuts of beef, pork, and lamb are recommended as well as more frequent use of fish, seafood and poultry. Egg yolks are restricted to two per week; substitution of vegetable oils is urged.

The Nutrition Intervention Program utilizes specifically prepared materials, such as audio-visual slide-tape presentations, a Grocery Shopping Guide, pamphlets, and a Cook Book designed to aid the participant and his family in making informed choices of foods. Much time is spent on individualization of the Basic Eating Pattern so that cultural and ethnic attributes as well as personal preferences can be included. The concept that the improved choices of MRFIT will benefit both the participant and his family is a basic one. The participant is taught that food selection and eating habits are related to a myriad of social and cultural factors. Family eating patterns, foods prepared for holidays and special occasions, the work setting, television commercials and the reaction and influences of friends, family, and business associates compete with the participant's willingness to adopt a new eating style. Constant encouragement and assessment of progress in new eating behaviors are provided by the staff both to enhance the transfer of knowledge and skills and to reduce recidivism. Many of the participants require sound authoritative nutritional information; the greatest obstacle in the way of dietary change is lack of motivation and conflicting priorities between health and the demands of daily living. A sub-group of particular interest is our Hispanic men. Although they are making progress in adapting their eating behaviors, cultural differences may act as deterrents.

All Intervention Staff have been trained by the nutritionists in the rationale and principles of the MRFIT eating pattern and have an active role in the dietary counseling directed toward risk factor reversal.

The baseline data for the Miami MRFIT Special Intervention Participants indicate that after one year progress has been made in approaching dietary goals.

2. Antihypertensive Efforts

Hypertension is the one risk factor for which medical treatment is given, utilizing a step-care protocol. The SI participant is considered hypertensive if he has a fifth phase diastolic reading of 90 mm Hg or greater on any two successive visits not more than a month apart. A participant is also considered hypertensive if he entered the program taking antihypertensive medication, or if he is placed on medication by a physician outside the MRFIT program at some time during the trial.

Blood pressure readings are taken after the participant has had a sitting rest period of at least five minutes. Four readings are taken in the sitting position, two on a standard Baumanometer and two on the Hawksley Random-Zero manometer which conceals the zero point until after the reading is taken. This is helpful in eliminating some elements of observer bias. All official readings are taken by certified technicians, whether nurses, counselors, physician or others. They are recertified for accuracy every six months using tape recordings of Korotkov sounds and double stethoscope checks.

Once confirmed as hypertensive, a participant who is 15% over ideal weight and has a diastolic pressure of less than 105 mm Hg, may be placed on weight reduction and salt restriction for up to 16 weeks in an attempt to reduce blood pressure. If indicated, he may also be placed on our step-care drug regimen on order of a MRFIT physician. Hypertensive participants are seen at two week to four month intervals as the situation or protocol requires.

Table 2 summarizes the MRFIT antihypertensive drug protocol. The majority of the participants in the Miami Center, as in other MRFIT sites, are controlled on Step One or Step Two medications. The most commonly used combination is a diuretic and reserpine.

The day he is placed on drugs, the participant's diatolic pressure goal is determined to be 89 mm Hg, or

Table 2. — MRFIT Antihypertensive Medication Protocol.

| Step | Medication Category | Drug |
|---|---|---|
| One: | Diuretic | Chlorthalidone 50-100 mg q.d. or hydrochlorothiazide 50-100 mg q.d. (If persistent hypokalemia exists the following are substituted or added) Spironolactone 50-100 mg q.d. Triamterene 100-200 mg q.d. |
| Two: | Add Anti-adrenergic | Reserpine (0.1-0.25) **or** if not tolerated Methyldopa 500-2000 mg q.d. Propranolol 40-480 mg q.d. |
| Three: | Add vasodilator | Hydralazine 30-200 mg q.d. |
| Four: | Add Anti-adrenergic | Guanethidine 10-200 mg q.d. |

Additional drugs provided when needed are:

1. 10% KCL elixir
2. Probenecid 500 mg tabs
   or Allopurinol 100 mg tabs
3. Digoxin 0.25 mg tabs

10 mm Hg below the level observed at the confirmation visit, whichever is lower. If a hypertensive particpant has blood pressure readings below goal for several months, he may be placed in a step-down program. If the pressure returns to a level above goal for two successive visits, however, he is placed back on the last dose of medication that controlled his pressure. When possible, it is preferred that a participant lower blood pressure by weight loss and salt restriction rather than by medication; we are seeking a lifestyle approach to preventative medicine. The participant's private physician may wish to prescribe antihypertensive medication and wish not to have us treat his patient for hypertension. In these instances we provide the drug if we have it, but do not try to divide the responsibility for the hypertension treatment. We do, however, continue to monitor the participant's progress.

A baseline blood pressure value was established for each participant. This was taken from the average of the second and the third screen diastolic blood pressures. The mean baseline national value of all MRFIT men was 91.0 mm Hg diastolic, and 90.2 mm Hg at the Miami Center. At one year the mean value in the SI group nationally was 84.6 and at two years, 82.5. At the Miami MRFIT the mean was 84.3 mm Hg at one year and 82.5 mm Hg at two years.

## Preliminary Results and Summary

Figure 1 depicts a comparison of the typical U.S. diet with the MRFIT recommended eating pattern. The MRFIT pattern represents a 58% reduction in dietary cholesterol, 19% decrease in total calories from fat, 56% decrease in saturated fat and 233% increase in polyunsaturated dietary fat.

Figure 2 indicates that MRFIT men at baseline exhibited differences in eating patterns compared to the "typical" American diet pattern, as per Figure 1. Our MRFIT men at baseline reported an intake of 461 mg of dietary cholesterol, 38% of total calories from fat, 14% of calories from saturated fat and 6% from polyunsaturated fats. These figures represent a pattern closer to the MRFIT recommendation than are those of the typical American diet.

Figure 2 also shows the Miami Center's progress in approaching the MRFIT dietary goals at 12 months. The Miami participants decreased their dietary cholesterol from 461 mg to 298 mg. Reduction to MRFIT goals to 35% of total calories from lipids was achieved. Saturated fat calories have been reduced from 13.6% to 10.7%, and those from polyunsaturated sources increased from 6.4% to 8%.

Figure 3 indicates our experience in risk factor reduction up to the second year of intervention. A decrease in mean serum cholesterol from a baseline of 255 mg/dl to 236 mg/dl has been achieved. From a mean diastolic blood pressure of 90.2 mm Hg, the Miami MRFIT participants showed a decrease to 82.5 mm Hg. Regarding our smoking experience, 35.5% reported not smoking by the end of the second year of intervention.

While substantial progress has been made in the SI group, the data cannot at this time include usual care men. It is also inappropriate to report clinical end point data prior to the conclusion of the experiment at all centers.

We are, however, encouraged that a project of this magnitude and complexity has been successfully initiated and continued to its third year of operation. The staff of the Miami MRFIT, in concert with all the centers, is dedicated to fulfilling the intervention goal of the national program. It is our challenge to determine whether the control of coronary heart disease risk factors will contribute significantly to decreasing the incidence of myocardial infarction — the paramount clinical and public health problem of our time.

## Acknowledgments

Acknowledgment is given to the following for their essential contribution to the operation of the Miami Center: Frank Batista, Julio Benezra, Reva Berlin, Dolores Bramson, Rolando Gomez, Hollis Jackson, Joan Kaye, Martha Padron, Eleanor Parenio, Walter Smith, Joyce Weddle, Morris Gilbert, M.D., Hugh Gilmore, M.D., Scheffel Wright, M.D., and Richard Morgan, M.D., M.P.H.

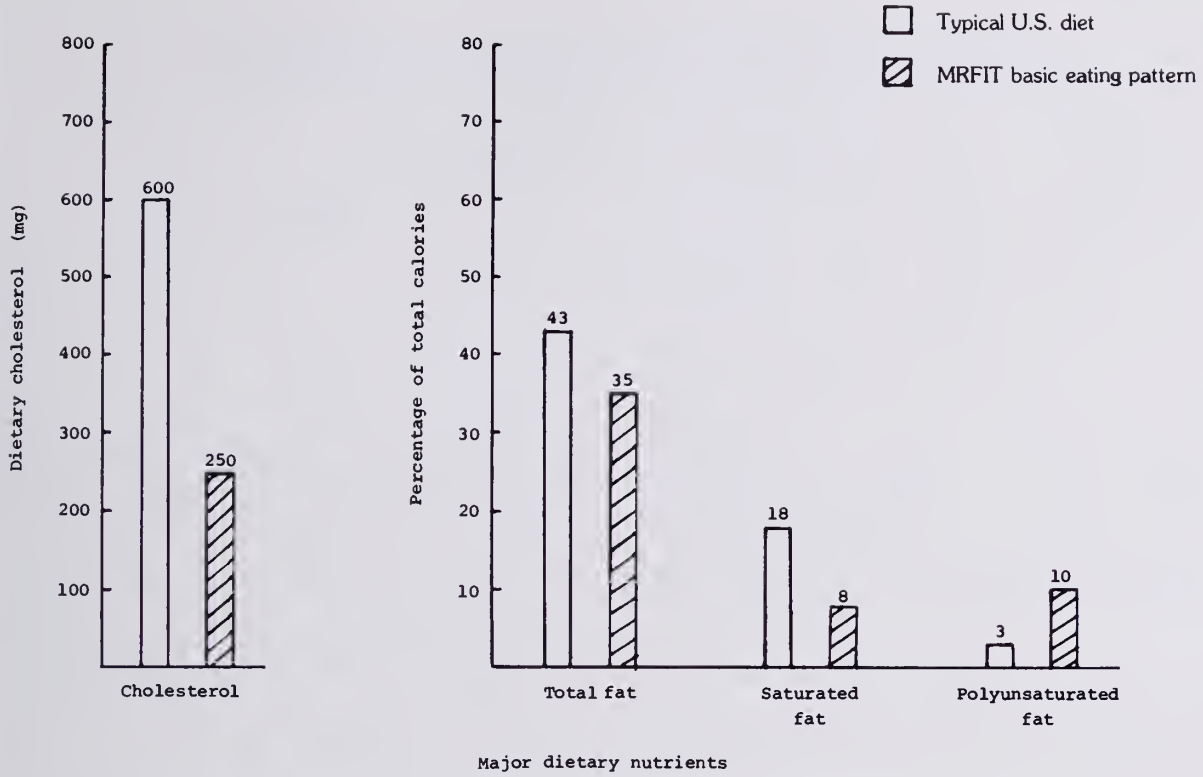


Fig. 1. — Comparison of the typical U.S. diet with MRFIT's recommended eating pattern.

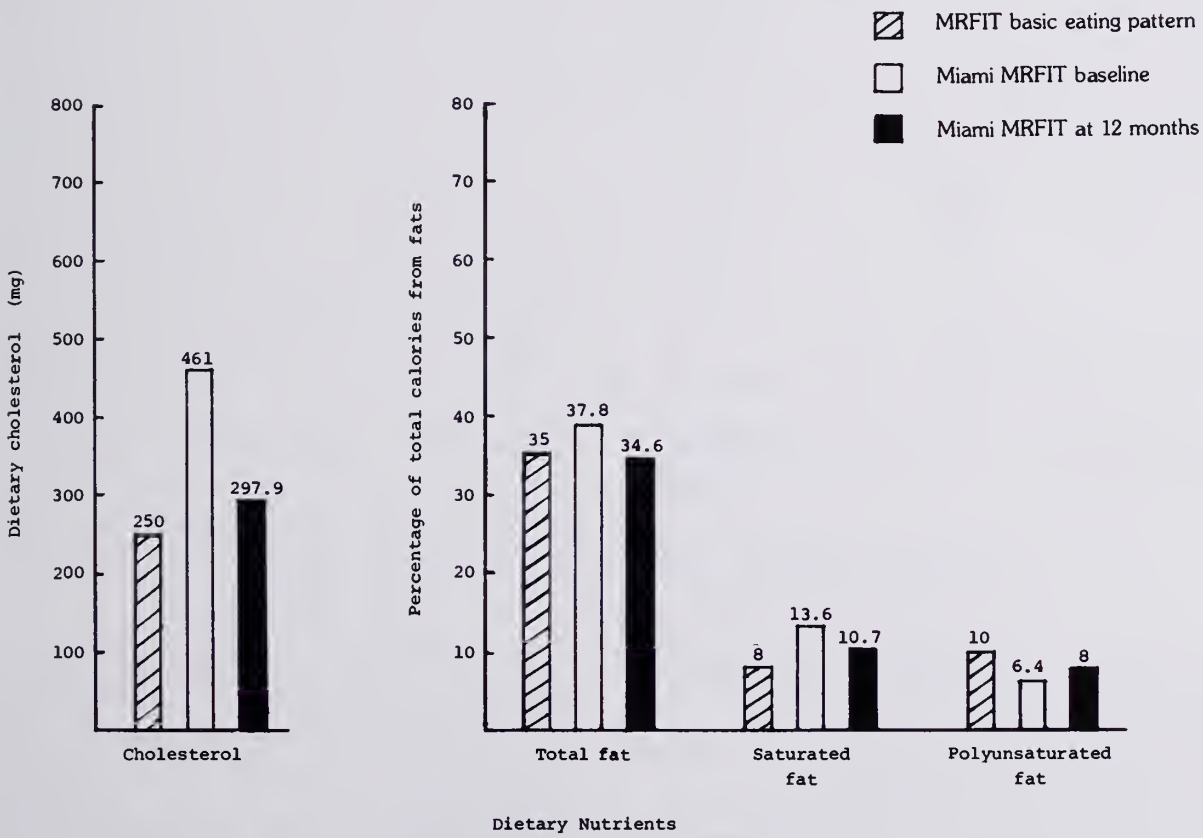


Fig. 2. — Intake of Selected Dietary Nutrients: Miami MRFIT SI Men at baseline and at 12 months compared to basic MRFIT pattern.

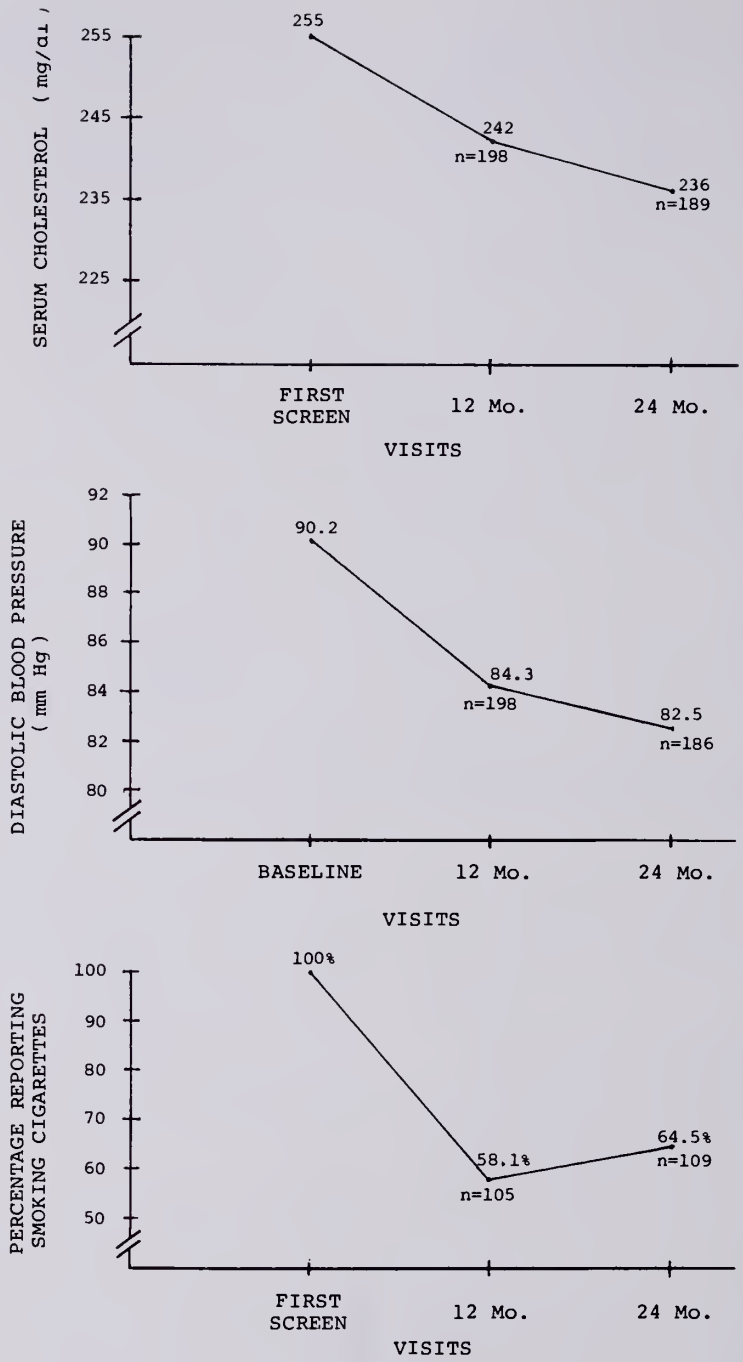


**Fig. 3. — Decrease in Risk Factor Status of Miami MRFIT Participants During Two Years of Intervention.**

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2. Primary Prevention of the Atherosclerotic Diseases, Report of Inter-Society Commission for Heart Disease Resources, Circulation 42:55-95, 1970.
3. Multiple Risk Factor Intervention Trial (MRFIT). A National Study of Primary Prevention of Coronary Heart Disease, JAMA Vol. 235 Bi, 8, p. 825-827, Feb. 23, 1976.
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6. Jenkins, C. D.; Rosenman, R. H., and Friedman, M.: Development of an Objective Psychological Test for Determination of the Coronary-Prone Behavior Pattern in Employed Men, J. Chronic Dis., 20:371-379, 1967.
7. Fincher, L., and Rauschert, M.: Diets of Men, Women and Children in the United States, Nutrition Program News U.S. Department of Agriculture, September-October, 1969.



- Dr. Burr, Dade County Department of Public Health and Nutrition Division, Department of Epidemiology and Public Health, University of Miami School of Medicine, Miami 33101.

# Nutrition References For You And Your Patient

Yank D. Coble Jr., M.D.

Vast sums are being spent by the American public on "health food," nutrition supplements, diet books, diet foods, weight reduction gimmicks, and nutrition information. Publishers have observed, profitably, that nutrition leads on magazine covers sell "off the rack" even better than sex. Thus, it is not surprising that the food quackery beliefs and practices of today, and those who are profiteering from it, can be compared to the patent medicine craze of the last century.

For the most part, self-acclaimed authorities, faddists, and hucksters have been the disseminators of this nutrition misinformation that Rynearson so appropriately labeled as "hogwash." Unfortunately, some of our well intentioned but misguided media and even some of our colleagues as well are distributing the "hogwash." Even more unfortunate, it can be harmful to more than the consumer's pocketbook, as evidenced by the mega vitamins, liquid protein, and other diet fads, which have resulted in disease and even death.

"What do you recommend I read about nutrition, Doctor?" is a familiar question. Obviously it is difficult for the general public today to choose the eminent nutrition author over the misinformer, both of whom may be featured side by side on the news stand. Thus the physician, with his understanding of the appeal of nutrition misinformation and recognizing its dangers, is in a position to provide appropriate authoritative and interesting nutrition information.

Consistent with the efforts of our FMA President, O. William Davenport, to concentrate our scientific activities in the field of nutrition this year we have provided below a list of nutrition references that we hope will be of use to you and your patients. To Drs. Lewis Barness, George Christakis, and Donald Macdonald and the other physicians and nutritionists who made recommendations and suggestions about this list, I wish to express my appreciation.

The first list contains general references on nutrition for your patient. **Recommended Dietary Allowances,** item #6, is a reference valuable to any physicians' office but is also of interest to the more sophisticated patient wishing specific data on allowances of each individual nutrient. Reference #7, **Nutritive Value of American Foods,** is also a valuable document for physicians' offices but of particular value to the sophisticated layman who is interested in content of foods. Reference #8, the **Index of Nutrition Education Materials,** provides a large bibliography of authoritative and attractive nutrition materials.

The second list relates primarily to the area of food faddism, quackery, and nutrition misinformation. References #1, #2 and #3 are written for the general public. Reference #4 should be of particular interest to the physician.

The third list is applicable to a specific nutritional problem, obesity. The magnitude of this problem in the United States and the single generally accepted approach — good nutritional and exercise habits — justify specific references in this area.

The fourth list relates to the most frequently neglected but vital segment of nutrition, exercise.

The fifth list is directed to the physician or health professional.

## I. GENERAL NUTRITIONAL REFERENCES

1. **Eat OK — Feel OK: Food Facts & Your Health**
   **Fredrick J. Stare, M.D. & Elizabeth M. Whelan, Sc.D.**
   **The Christopher Publishing House, North Quincy, Mass. 1978 ($9.75)**

2. **Let's Talk About Food**
   **Philip L. White, Sc.D. & Nancy Selvey, R.D.**
   **P.F.G., Inc.**
   **545 Great Road, Littleton, Mass. 01460 1977 ($6.95 cloth; $5:00 paper)**

3. **Realities of Nutrition**
   **Ronald M. Deutsch**
   **Bull Publishing Company**
   **P.O. Box 208, Palo Alto, Calif. 94302 1976 ($9.95)**

4. Nutrition & Food Choices
Kristen W. McNutt & David R. McNutt
Science Research Associates
1540 Pagemill Road, Palo Alto, Calif. 94304
1978 ($12.95)

5. Nutrition Source Book
National Dairy Council
6300 N. River Road
Rosemont, Ill. 60018 1978
(complimentary from publisher)

6. Recommended Dietary Allowances
8th Revised Edition, 1974 Food and Nutrition Board
National Academy of Sciences
2101 Constitution Avenue
Washington, D.C. 20418
(9th revised edition planned for 1979)
($4.25 paper)

7. Nutritive Value of American Foods (Revised April 1977)
United States Department of Agriculture
Agriculture Research Service (For Sale by Superintendent of Documents, U.S. Gov't. Printing Office, Washington, D.C. 20402 — Stock #001-00-03184-8) ($5.15)

8. Index of Nutrition Education Materials
The Nutrition Foundation
888 17th Street, N.W.
Washington, D.C. 20006 ($8.75)

## II. NUTRITION MISINFORMATION, FOOD FADDISM AND QUACKERY

1. New Nuts Among The Berries
Ronald M. Deutsch
Bull Publishing Company
P.O. Box 208
Palo Alto, Calif. 94302 1977 ($8.95)

2. Panic In The Pantry
Elizabeth M. Whelan, Sc.D. & Fredrick J. Stare, M.D.
Atheneum,
New York, New York
Dist by: Book Warehouse, Inc., Vreeland Avenue
Patterson, N.J. 07512 1976 ($3.95 paper)

3. The Health Robbers: How To Protect Your Money & Your Life
Stephen Barrett, M.D., Editor & Gilda Knight, Co-editor
George F. Stickley Company, Publisher
210 West Washington Square
Philadelphia, Penn. 19106 1976 ($10.50)

4. Nutrition Misinformation and Food Faddism
D. M. Hegsted & Philip L. White, editors
The Nutrition Foundation
Office of Education
888 17th Street, N.W.
Washington, D.C. 20006 July 1974 ($2.50)

## III. PHYSICAL FITNESS AND NUTRITION

1. The New Aerobics
Kenneth H. Cooper, M.D.
M. Evans & Company, Inc.
New York, New York 1970
Hardbound distributed by J. B. Lippincott Company, E. Washington Square
Philadelphia, Penn. 19105 ($6.95)
Paperback distributed by Bantam Books, Inc., 414 E. Golf Road, Desplaines, Illinois 60016 ($2.95)

2. Nutrition For Athletics
The Nutrition Foundation
Office of Education
888 17th Street, N.W.
Washington, D.C. 20006 ($3.00)

3. The President's Council on Physical Fitness & Sports
(Information provided on request)
C. Carson Conrad, Executive Director
Washington, D.C. 20201

## IV. OBESITY

1. Healty Approach To Slimming (OPOO3)
American Medical Association
P.O. Box 821
Monroe, Wisconsin 54566 1978 ($1.00)

2. Slim Chance In A Fat World
   Richard B. Stuart & Barbara Davis
   Research Press Company
   Champaign, Ill. 1972 ($4.95)

3. Permanent Weight Control
   Michael J. Mahoney & Kathryn Mahoney
   W. W. Norton & Co., Inc.
   500 5th Avenue
   New York, New York 10036 1976 ($7.95)

4. Obesity
   The Nutrition Foundation
   Office of Education
   888 17th Street, N.W.
   Washington, D.C. 20006 (complimentary)

5. Eating Is Okay!
   Henry A. Jordan, M.D.
   New American Library, Inc.
   1301 Avenue of the Americas
   New York, N.Y. 10019 1978 ($1.50 paper)

## V. NUTRITION REFERENCES FOR THE PHYSICIAN AND HEALTH PROFESSIONAL

1. Nutritional Support of Medical Practice
   Howard A. Schneider, Ph.D., Carl E. Anderson, Ph.D., & David B. Coursin, M.D.
   Harper & Row, Publishers
   2350 Virginia Avenue
   Hagerstown, Md. 21740 1977 ($25.00)

2. Nutrition Reviews: Present Knowledge in Nutrition (4th edition)
   The Nutrition Foundation
   Office of Education
   888 17th Street, N.W.
   Washington, D.C. 20006 1976 ($8.50)

3. Nutrition Reviews
   The Nutrition Foundation
   Office of Education
   888 17th Street, N.W.
   Washington, D.C. 20006
   (subscription $15.00 per year)

4. Drug — Induced Nutritional Deficiencies
   Daphne A. Roe, M.D.
   The Avi Publishing Company, Inc.
   250 Post Road E
   Westport, Conn. 06880 1976 ($21.00)

5. American Journal of Clinical Nutrition
   9650 Rockville Pike
   Bethesda, Maryland 20014 ($15.00 per year)

6. Journal of Parenteral & Enteral Nutrition
   The Williams & Wilkens Company
   428 East Preston Street
   Baltimore, Maryland 21202
   ($35.00 per year for non-members)

7. Nutrition Today
   Nutrition Today, Inc.
   703 Giddings Avenue
   P.O. Box 1829
   Annapolis, Md. 21401
   (bi-monthly publication, annual subscription ($12.50)

● Dr. Coble, 2700 Riverside Avenue, Jacksonville 32205.

# Nutrition Quiz

Choose the **one** correct or most appropriate answer to the following questions by circling the letter:

1. **Nutrition can be defined as the science and art of**
   a) The use of food to promote health.
   b) How micronutrients work metabolically.
   c) How and why people eat the way they do.
   d) Many sciences such as agriculture, epidemiology, clinical medicine.
   e) All of the above.

2. **Chemicals in food are often looked at negatively. A hot steamy solution containing, among other things, caffeine, tannin, essential oils, butyl, isoamyl, phenyl ethyl, hexyl and benzyl alcohols, and geraniol describes which of the following beverages:**
   a) Coffee
   b) Tea
   c) Buttered rum
   d) Spiced wine
   e) Chocolate drink

3. **The function of mucus in the gastrointestinal tract is to provide the following role(s):**
   a) Emulsify food particles.
   b) Protect the epithelium.
   c) Buffer acids or alkalies.
   d) All of the above.
   e) (b) and (c)

4. **Which of the following statements accurately describes a micronutrient?**
   a) Essential in small amounts for human growth and welfare.
   b) Functions primarily at the cellular, molecular and enzymatic levels.
   c) Few known elements currently identified.
   d) (a) and (b)
   e) All of the above

5. **Serum cholesterol can be effectively lowered by all of the following except:**
   a) Vitamin E
   b) Relatively high dietary intake of polyunsaturated fatty acids.
   c) Relatively low dietary intake of palmitic and stearic fatty acids.
   d) Cholestyramine.
   e) Weight loss in the obese.

6. **Which of the vitamin deficiencies may require medical emergency treatment?**
   a) $B^6$ and Vitamin E
   b) Vitamin A and Vitamin D
   c) Pantothenic acid and Vitamin D
   d) Vitamin C and Vitamin $B_2$ (riboflavin)
   e) Vitamin A and Vitamin $B_1$ (thiamine)

7. **Of the following, which can be considered to be related to decreased prevalence of colon cancer?**
   a) Milk
   b) Cereal grains
   c) Sugar Cane
   d) Tea
   e) Halvah

8. **Which is popularly believed to be effective in preventing coronary heart disease, but has yet to be proven?**
   a) Vitamin $B_{15}$
   b) Xanthine oxidase
   c) Vitamin E
   d) Vitamin A
   e) Pantothenic acid

9. **Regarding the prevalence of malnutrition in the U.S.,**
   a) The overall prevalence is 30%
   b) There is no evidence that it exists.
   c) From 8-18% of low income groups have low or deficient serum vitamin levels.
   d) A negligible prevalence of signs and symptoms of vitamin deficiency exists.
   e) Iron deficiency is uncommon.

10. **Which of the following vitamins can cause severe toxicity and death?**
    a) Pantothenic acid and pyridoxal phosphate
    b) Vitamin A and Vitamin E
    c) Vitamin D and Vitamin A
    d) Vitamin D and Vitamin $B_2$
    e) None of the above

11. **Which of the following are effective in decreasing elevated serum triglyceride levels?**
   a) Decrease in dietary alcohol and administration of clofibrate.
   b) Decrease in monounsaturated lipids and oligosaccharides.
   c) Increase in polyunsaturated fatty acids and Vitamin C.
   d) Decrease in protein and lipids.
   e) None of the above.

12. **The approximate prevalence of serum cholesterol levels 260 mg/dl or above in U.S. men (age 35-56) is**
   a) 20%
   b) 30%
   c) 10%
   d) 50%
   e) 15%

13. **The Framingham Study findings revealed the following except**
   a) A serum cholesterol level of 260 mg/dl is associated with a 6-fold risk of coronary heart disease.
   b) Elevated serum cholesterol, hypertension and smoking are the prime risk factors of coronary heart disease.
   c) High salt intake is related to hypertension.
   d) Obesity is related to sudden death.
   e) Sedentary individuals had a significantly greater prevalence of coronary heart disease compared to those who were physically active.

14. **Factors that may be involved in the increased incidence of hypertension in Blacks include the following except**
   a) High dietary salt intake.
   b) Genetic factors.
   c) Psycho-social stress.
   d) Obesity.
   e) Elevated saturated fat intake.

15. **The following are true concerning the epidemiology of hypertension except**
   a) Blood pressure increases with age in all population groups.
   b) Hypertension is not always a risk factor of coronary heart disease.
   c) Weight reduction of obese hypertensives can decrease blood pressure significantly.
   d) The major clinical manifestations of hypertension are strokes, cardiac and renal failure.
   e) The Japanese, Caribbean and American Blacks exhibit the highest worldwide prevalence of hypertension.

16. **The prevalence of adolescent obesity in the U.S. is**
   a) 20-25%
   b) 10-15%
   c) 5%
   d) 30-35%
   e) None of the above

17. **The metabolic and nutritional factors associated with obesity include the following except**
   a) Hyperinsulinism
   b) Hypertriglyceridemia
   c) Carbohydrate intolerance
   d) Hypoferremia
   e) Hyperadrenalism

18. **Which of the following agencies are involved in the monitoring of nutritional products:**
   a) FTC and FDA
   b) FTC and EPA
   c) FDA and EPA
   d) HEW and NIH
   e) None of the above

19. **An average supermarket contains the following number of different food items from which the housewife must choose to build a nutritious diet for her family:**
   a) 1,000
   b) 500
   c) 5,000
   d) 15,000
   e) None of the above

20. **The use of wheat germ contributes the following to the daily meal pattern:**
   a) Substantial amounts of polyunsaturated fatty acids
   b) B vitamins, a small amount of polyunsaturated fatty acids and fiber
   c) Large amounts of trace minerals
   d) Large amounts of carbohydrates
   e) None of the above

21. **High intakes of the water-soluble vitamins (100 times RDA)**
   a) Are non-toxic at any level.
   b) Improves appetite and well-being in controlled studies.
   c) only result in "expensive and colorful urine" (elevated levels of urinary riboflavin makes urine fluoresce).
   d) Have been known to cause death.
   e) Have been shown to improve schizophrenia in large controlled studies.

22. **Vitamin E**
   a) Has been proven to be non-toxic.
   b) May enhance blood coagulation.
   c) Improves virility.
   d) Can cure sterility.
   e) Is found in substantial amounts in lentils.

23. **Of the following current "folk-medicine" concepts, which has/have the most valid scientific bases?**
   a) Grapefruits catalyze the oxidation of other foods.
   b) Low carbohydrate diets are expecially effective in weight loss.
   c) Garlic can decrease elevated blood pressure.
   d) (a) and (b)
   e) None of the above.

24. **Which of the following is true:**
   a) Freshly ground peanut butter has less saturated fat than commercially prepared peanut butter.
   b) There is a 70% loss of water-soluble vitamins in canned spinach and asparagus.
   c) Freezing fruits retains more of their Vitamin C content than canning them.
   d) Lentils have a very low protein content.
   e) None of the above.

25. **Regarding the treatment of obesity, which of the following is true:**
   a) Amphetamines have an important place in treatment.
   b) If the same number of calories (for example 1,200 per day) are derived from different sources of macronutrients (fats, proteins and carbohydrates) the weight loss after 3-4 weeks will be identical.
   c) There is about 50% recidivism of weight loss after one year when obesity is treated by internists.
   d) Behavior modification techniques usually involve in-depth probing of the psychogenic determinants of obesity.
   e) Group weight reduction provides no higher success rates than individual treatment regimens.

26. **Which is true regarding vegetarians:**
   a) Macrocytic anemias are rarely encountered.
   b) Use of vegetable sources of protein, excluding lentils and chick-peas are adequate for the protein needs of children.
   c) Wheat as a source of protein can be adequate for adults.
   d) Vegetarianism is rarely linked to religious-philosophical beliefs.
   e) People who predominantly consume a high wheat diet develop more beri-beri than those consuming high intakes of rice.

27. **Which of the following additives is probably harmless:**
   a) Calcium proprionate
   b) Diethylstilbestrol
   c) Nitrates
   d) Cobalt
   e) Butylated hydroxy anisole

28. **Concerning cooking practices, the following are true except:**
   a) Cooking vegetables in a small amount of water conserves water-soluble vitamins.
   b) Parboiling rather than boiling rice conserves B vitamins.
   c) Frying pans with teflon surfaces reduce the need for oil in frying.
   d) Baking may severely oxidize water-soluble vitamins.
   e) Toasting bread decreases its caloric content by 10%.

29. **Good shopping practices include the following except:**
   a) Purchase of bread one-day old seriously impairs its nutritional value.
   b) It's wiser not to go shopping when you're hungry.
   c) Plan to shop on a weekly rather than a daily basis.
   d) Impulse buying usually increases the food bill.
   e) Using a shopping list is efficient and economical.

30. **Which of the following does not represent a "good buy" nutritionally for a low-income family?**
   a) Loaf of bread (whole wheat or white)
   b) Skim milk power
   c) Protein-enriched spaghetti
   d) Peanut butter
   e) Lettuce

# Key: Nutrition Quiz

1. e
2. b
3. e
4. d
5. a
6. e
7. b
8. c
9. c
10. c
11. a
12. b
13. c
14. e
15. a
16. b
17. e
18. a
19. c
20. b
21. c
22. b
23. e
24. c
25. b
26. c
27. a
28. e
29. a
30. 3

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**Tenuate®** ℃
(diethylpropion hydrochloride NF)

**Tenuate Dospan®**
(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION
Brief Summary
**INDICATION:** Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.
**CONTRAINDICATIONS:** Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).
**WARNINGS:** If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. *Drug Dependence:* Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy:* Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children:* Tenuate is not recommended for use in children under 12 years of age.
**PRECAUTIONS:** Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.
**ADVERSE REACTIONS:** *Cardiovascular:* Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System:* Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal:* Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic:* Urticaria, rash, ecchymosis, erythema. *Endocrine:* Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System:* Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous:* A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.
**DOSAGE AND ADMINISTRATION:** Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in midevening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.
**OVERDOSAGE:** Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.
Cayey, Puerto Rico 00633
*Direct Medical Inquiries to:*
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References: 1. Citations available on request — Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M.. A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy. Jan. 20-21, 1977.

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8-3921 (Y587A)

# Whether overweight is a complicating factor... or just uncomplicated overweight.

# Tenuate® Dospan® ©IV
## (diethylpropion hydrochloride NF)
**75 mg. controlled-release tablets**

### A useful short-term adjunct in an indicated weight loss program.

Overweight patients in certain diagnostic categories often require strict obesity control. Diethylpropion hydrochloride has been reported useful in obese patients with hypertension, symptomatic cardiovascular disease, or diabetes. While it is not suggested that Tenuate in any way reduces these complications in the overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. (Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.)

### In uncomplicated obesity.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

### Clinical effectiveness.

The anorexic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.[1] And the unique chemistry of Tenuate provides "...anorexic potency with minimal overt central nervous system or cardiovascular stimulation."[2] Compared with the amphetamines, diethylpropion has minimal potential for abuse.

**Tenuate—it makes sense. And it's responsible medicine.**

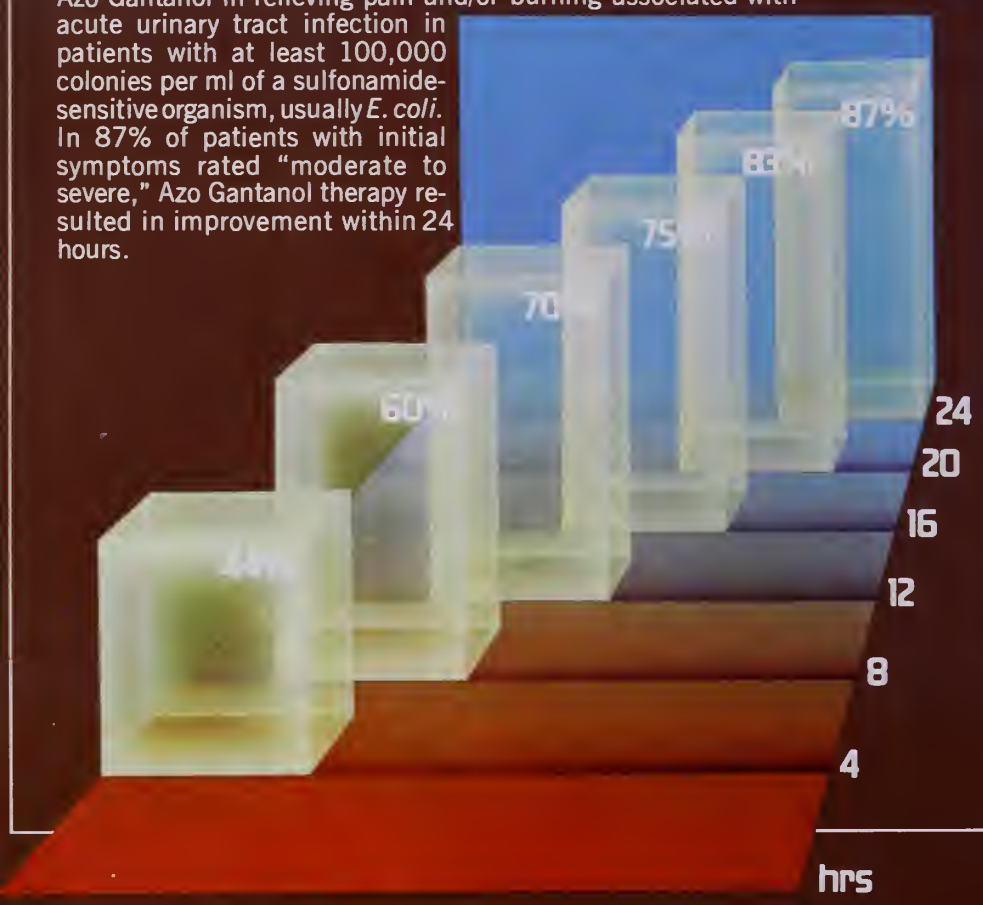
**Merrell**

For prescribing information see opposite page

## Important data on the pain of acute cystitis:

# In 87% of patients studied [303 of 349], Azo Gantanol® reduced pain and/or burning within 24 hours*

A controlled, multicenter study assessed the efficacy of Azo Gantanol in relieving pain and/or burning associated with acute urinary tract infection in patients with at least 100,000 colonies per ml of a sulfonamide-sensitive organism, usually *E. coli*. In 87% of patients with initial symptoms rated "moderate to severe," Azo Gantanol therapy resulted in improvement within 24 hours.




**Before prescribing, please consult complete p uct information, a summary of which follows:**

**Indications:** In adults, urinary tract infections complicated by pain (primarily pyelonephritis pyelitis and cystitis) due to susceptible organ (usually *E. coli, Klebsiella-Aerobacter, Staph coccus aureus, Proteus mirabilis*, and, less fr quently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. **Note: fully coordinate *in vitro* sulfonamide sensitivi tests with bacteriologic and clinical response; aminobenzoic acid to follow-up culture media increasing frequency of resistant organisms li the usefulness of antibacterials including sul fonamides.** Measure sulfonamide blood level variations may occur; 20 mg/100 ml should maximum total level.

**Contraindications:** Children below age 12; su fonamide hypersensitivity; pregnancy at term during nursing period; because Azo Gantanol tains phenazopyridine hydrochloride it is co dicated in glomerulonephritis, severe hepatit uremia, and pyelonephritis of pregnancy with disturbances.

**Warnings:** Safety during pregnancy not estab Deaths from hypersensitivity reactions, agran tosis, aplastic anemia and other blood dyscra have been reported and early clinical signs ( throat, fever, pallor, purpura or jaundice) ma dicate serious blood disorders. Frequent CBC urinalysis with microscopic examination are ommended during sulfonamide therapy.

**Precautions:** Use cautiously in patients with paired renal or hepatic function, severe aller bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria stone formation.

**Adverse Reactions:** *Blood dyscrasias* (agran ulocytosis, aplastic anemia, thrombocytopen leukopenia, hemolytic anemia, purpura, hyp thrombinemia and methemoglobinemia); *all reactions* (erythema multiforme, skin eruptio Stevens-Johnson syndrome, epidermal necro urticaria, serum sickness, pruritus, exfoliativ dermatitis, anaphylactoid reactions, periorbi edema, conjunctival and scleral injection, p sensitization, arthralgia and allergic myocar *G.I. reactions* (nausea, emesis, abdominal hepatitis, diarrhea, anorexia, pancreatitis an stomatitis); *CNS reactions* (headache, perip neuritis, mental depression, convulsions, at hallucinations, tinnitus, vertigo and insomni *miscellaneous reactions* (drug fever, chills, t nephrosis with oliguria and anuria, periarteri nodosa and L. E. phenomenon). Due to cert chemical similarities with some goitrogens, uretics (acetazolamide, thiazides) and oral h glycemic agents, sulfonamides have caused instances of goiter production, diuresis and glycemia. Cross-sensitivity with these agent exist.

**Dosage:** Azo Gantanol is intended for the ac painful phase of urinary tract infections. *Usi adult dosage:* 2 Gm (4 tabs) initially, then 1 (2 tabs) B.I.D. for up to 3 days. If pain persi causes other than infection should be sough After relief of pain has been obtained, conti treatment with Gantanol (sulfamethoxazole) be considered.

*NOTE:* Patients should be told that the oran dye (phenazopyridine HCl) will color the uri

**Supplied:** Tablets, red, film-coated, each co ing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl—bottles of 100 and 5

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# Azo Gantanol®

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**for the pain** **for the pathogens**

*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey 07110.

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## (diethylpropion hydrochloride NF)
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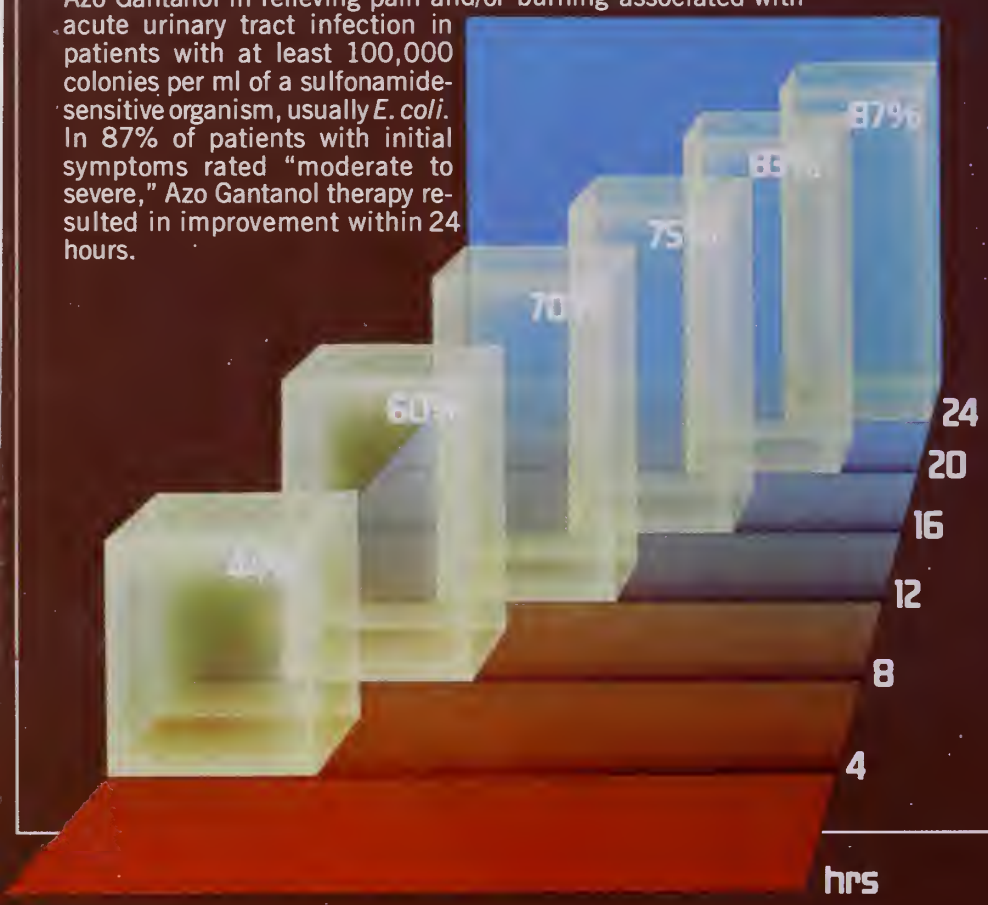


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**Warnings:** Safety during pregnancy not establ Deaths from hypersensitivity reactions, agran tosis, aplastic anemia and other blood dyscra have been reported and early clinical signs ( throat, fever, pallor, purpura or jaundice) ma dicate serious blood disorders. Frequent CBC urinalysis with microscopic examination are r ommended during sulfonamide therapy.

**Precautions:** Use cautiously in patients with i paired renal or hepatic function, severe aller bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria stone formation.

**Adverse Reactions:** *Blood dyscrasias* (agran ulocytosis, aplastic anemia, thrombocytopen leukopenia, hemolytic anemia, purpura, hyp thrombinemia and methemoglobinemia); *alle reactions* (erythema multiforme, skin eruptio Stevens-Johnson syndrome, epidermal necro urticaria, serum sickness, pruritus, exfoliativ dermatitis, anaphylactoid reactions, periorbi edema, conjunctival and scleral injection, ph sensitization, arthralgia and allergic myocard *G.I. reactions* (nausea, emesis, abdominal p hepatitis, diarrhea, anorexia, pancreatitis an stomatitis); *CNS reactions* (headache, periph neuritis, mental depression, convulsions, ata hallucinations, tinnitus, vertigo and insomni *miscellaneous reactions* (drug fever, chills, t nephrosis with oliguria and anuria, periarteri nodosa and L. E. phenomenon). Due to cert chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral h glycemic agents, sulfonamides have caused instances of goiter production, diuresis and glycemia. Cross-sensitivity with these agents exist.

**Dosage:** Azo Gantanol is intended for the ac painful phase of urinary tract infections. *Usu adult dosage:* 2 Gm (4 tabs) initially, then 1 (2 tabs) B.I.D. for up to 3 days. If pain persi causes other than infection should be sough After relief of pain has been obtained, conti treatment with Gantanol (sulfamethoxazole) be considered.

*NOTE:* Patients should be told that the oran dye (phenazopyridine HCl) will color the urin

**Supplied:** Tablets, red, film-coated, each co ing 0.5 Gm sulfamethoxazole and 100 mg. phenazopyridine HCl—bottles of 100 and 5

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**Adverse Reactions:** Theophylline may exert some stimulating effect on the central nervous system. Its administration may cause local irritation of the gastric mucosa, with possible gastric discomfort, nausea, and vomiting. The frequency of adverse reactions is related to the serum theophylline level and is not usually a problem at serum theophylline levels below 20 mcg/ml.

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**Warnings:** Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**
**Precautions:** If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.
**Side Effects:** Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

ROCHE
Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

Oral formulation eliminates the need for sublingual tablets

# ORAL HYDERGINE®

**TABLETS, 1 mg**

Each 1 mg Hydergine tablet contains dihydroergocornine mesylate 0 333 mg, dihydroergocristine mesylate 0 333 mg. and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2 1) mesylate 0 333 mg. representing a total of 1 mg

## an improvement that's easy to swallow

- no waiting for tablets to dissolve under the tongue
- easier dose administration for increased patient compliance—less need for supervision
- human bioavailability demonstrated

## for many elderly patients with selected symptoms such as...

- confusion
- mood-depression
- dizziness

**Contraindications**: Hypersensitivity to the drug

**Precautions:** *Because the target symptoms are of unknown etiology. careful diagnosis should be attempted before prescribing Hydergine tablets and sublingual tablets*

**Adverse Reactions:** Serious side effects have not been found Some sublingual irritation transient nausea and gastric disturbances have been reported Hydergine tablets and sublingual tablets do not possess the vasoconstrictor properties of natural ergot alkaloids

**Dosage and Administration:** 1 mg three times daily Alleviation of symptoms is usually gradual and results may not be observed for 3-4 weeks

**How Supplied: Hydergine tablets (for oral use) 1 mg,** packages of 100 and 500 **Hydergine sublingual tablets 1 mg,** containing dihydroergocornine mesylate 0 333 mg. dihydroergocristine mesylate 0 333 mg and dihydroergocryptine (dihydro alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2 1) mesylate 0 333 mg representing a total of 1 mg packages of 100. 500. and 1000 **Hydergine sublingual tablets 0.5 mg,** containing dihydroergocornine mesylate 0 167 mg. dihydroergocristine mesylate 0 167 mg. and dihydroergocryptine (dihydro alpha ergocryptine and dihydro beta-ergocryptine in the proportion of 2 1) mesylate 0 167 mg representing a total of 0 5 mg. packages of 100 and 1000

*Before prescribing, see package insert for full product information*

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(1 tab. t.i d )

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SANDOZ

THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION INC

MAY 1979 • VOL 66 • NO 5

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MAY COVER — This drawing was submitted by Miss Pat Flynn, of Orlando. This is the second cover Miss Flynn has done for The Journal. The First was on the January 1979 issue.

"...a more satisfactory treatment..."[1]

# VITAMIN C

## MICRO-DIALYSIS SUSTAINED RELEASE

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# CEVI-BID

CEVI-BID Capsules permit convenient, b.i.d. dosage for more predictable, sustained vitamin C blood levels all day and night. This avoids the "peaks and valleys" that result from ordinary vitamin C intake (wasteful renal excretions at high levels and less than optimum amounts of vitamin C at low levels). The unpredictability of enteric-coated vitamin C is also avoided. Cevi-Bid's unique micro-dialysis principle provides release of 500 mg. of vitamin C during a 12 hour period at a smooth, uniform rate.

"This method [CEVI-BID] provides a more satisfactory treatment of disorders requiring administration of vitamin C in repeated doses of relatively small amounts."[1]

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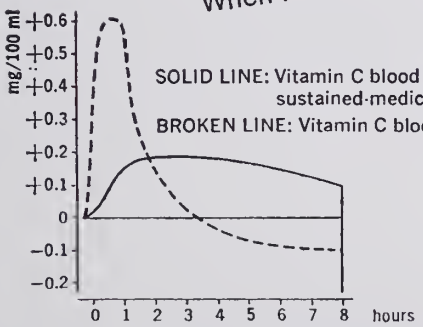


SOLID LINE: Vitamin C blood levels obtained with sustained-medication capsules (CEVI-BID).

BROKEN LINE: Vitamin C blood levels obtained with tablets.

*Comparison of ascorbic acid blood levels after administration of 1 gram of ascorbic acid in effervescent tablet form and 1 gram of CEVI-BID (2 capsules). *Adaptation

Samples on Request

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Box 68
Pioneers in Geriatric Research

1. Riccitelli, M. L.: Vitamin C Therapy in Geriatric Practice, J. Amer. Geriatrics Soc. 20: 34, 1972.

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Professional Liability Legal Update

# Leading Causes of Medical Malpractice Actions

The Florida Medical Association, Inc., has been involved in the sponsorship of a professional liability insurance plan since 1963. During the period of 1963 through 1978, computerized statistics have been kept concerning the causes of medical malpractice allegations. Through 1978, there were approximately 8,000 claims representing losses in the amount of approximately $100 million. The causes of these losses have been compiled into 21 categories according to their frequency and severity. The changes in these statistics have been monitored closely year by year. Improper diagnosis and technical surgical error continue to be the leading causes of claims, but in the past two years injuries to child in childbirth has moved into the top 10. More important perhaps is the fact that during the same recent period improper anesthesiology has become the number one cause for losses while injuries to child in childbirth and injuries to mother in childbirth have become numbers two and three. A few years ago, these three did not appear in the top 10 as to severity. This is an important trend in loss development that will need close monitoring during the next two or three years. It should also sound an alarm to anesthesiologists, obstetricians, and pediatricians to document thoroughly those procedures with which they become involved.

(See opposite page)

## Medical Mediation Hearings

The Florida Medical Mediation Statute provides that a hearing before a medical mediation panel must be commenced within six months of the filing of the claim or the jurisdiction of the panel is terminated. In this action, the parties stipulated to a "commencement" hearing before the judicial referee alone. A petition for Writ of Certiorari was taken to the Fourth District Court of Appeal to determine whether jurisdiction is preserved when the judicial referee by himself, without the other two members of the panel, commences a final medical mediation hearing within the required six months. After a review of the pertinent statutory provisions and rules, the District Court held that "a hearing before a three member panel was mandatory and jurisdictional. This being so we are without authority to make exceptions and this medical mediation panel has lost jurisdiction and can proceed no further." *Diggett v. Conkling (Fla. 4th DCA, Case No. 78-1878, February 21, 1979.)*

## Defamation — Discovery of Medical Review Committee Proceedings

The respondent physician brought a defamation action against members of a hospital review committee alleging that they had maliciously published false and defamatory matters about the respondent during the course of their review proceedings. The trial judge ruled that discovery of the committee proceedings should be allowed, and the petitioners sought appellate review of that ruling. In upholding the trial courts allowance of discovery, the District Court recognized that Section 768.40(2) grants immunity to members of certain medical review committees from actions by physicians and other health care providers, arising out of the committee proceedings, so long as the committee member does not act with malice or fraud. Section 768.40(4) appears to bar discovery of any committee proceedings or records "in any civil action" against a health care provider. The District Court agreed with the trial court's conclusion that the "malice or fraud" exception contained in Section 768.40(2) also applied to Section 768.40(4), and hence discovery was not barred in actions where there was no immunity by reason of the existence of malice or fraud. *Good Samaritan Hospital Association, Inc. v. Simon (Fla. 4th DCA, Case Nos. 78-1449, 78-1770, 78-1771, 78-1772, 78-1773, 78-1774, February 14, 1979.)*

# Ten Leading Malpractice Causes (Florida Medical Association's Sponsored Plans 1963 - 1978)

### FREQUENCY

1. Improper diagnosis (not involving surgery).
2. Technical surgical error.
3. Adverse reactions to drugs.
4. Improper treatment of fractures.
5. Improper anesthesiology.
6. Injury from falls (during examination or while under doctor's care).
7. Foreign body left in patient during surgery.
8. Injury to child in childbirth.
9. Infection in surgical site.
10. Dental damage during anesthesia.

### SEVERITY

1. Improper anesthesiology.
2. Injury to child in childbirth.
3. Injury to mother in childbirth.
4. Technical surgical error.
5. Improper diagnosis (not involving surgery).
6. Infection in surgical site.
7. Adverse reaction to drugs.
8. Improper informed consent for surgery.
9. Disfigurement from surgery.
10. Abandonment.

# Federal Courts Must Enforce Florida's Medical Malpractice Law

An administratrix of a deceased patient brought a medical malpractice action against two physicians, a hospital, and their malpractice insurance carriers seeking damages under the Florida Wrongful Death Act. The United States District Court for the Southern District of Florida dismissed the action on the ground that the administratrix had failed to perform a condition precedent to her suit by not proceeding before a Florida Malpractice Mediation Panel as required by Section 768.44, Florida Statutes. On appeal, the district court's ruling was affirmed by the Fifth Circuit Court of Appeals which held that: (1) federal courts must enforce the requirement of Florida's Medical Malpractice Law that a medical malpractice claimant must participate in the mediation process prior to initiating an action in court; (2) the classifications created by Sections 768.44 and 768.47 did not violate the constitutional standards pertaining to equal protection and substantive due process, and; (3) the Florida Medical Malpractice Act's provision for mandatory screening by a mediation panel prior to filing of a court action and admission of the mediation panel's decision into evidence in the subsequent trial did not unconstitutionally restrict the malpractice claimant's Seventh Amendment right to a jury trail. *(Woods v. Holy Cross Hospital, Case No. 75-3523, Mar. 26, 1979).*

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Prepared and submitted by John E. Thrasher, J.D., Vice President and Legal Counsel and Anthony J. McNicholas, III, J.D., Associate Legal Counsel, Professional Insurance Management Co. (PIMCO), Jacksonville, Florida.

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**The best way to destroy an enemy is to make him your friend.**

**Lincoln**

# The Maker

## Examining a Few Myths About Prescribing.

Increasing pressure is being put on the practicing physician to prescribe drugs generically. You are told that brand-name products are universally "expensive" and generic versions are relatively "cheap." To make this case, the most extreme (rather than typical) price differentials are cited. Thus, consumers are led to believe that such differentials are commonplace. Even your knowledge and your motives as a physician are questioned.

Understandably, these views have created myths. We think it's time to examine them in the light of all the facts and ramifications.

*MYTH: There are no differences in quality and performance between brand-name products and their generic counterparts. The corollary is that there are no differences among products made by high-technology, quality-conscious, research-based companies and those made by commodity-type suppliers.*

**FACT: The Food and Drug Administration does a good job in monitoring a generally excellent drug supply. Still, it has nowhere near the resources to guarantee the quality and bioavailability of all marketed products at any given time. Just a few months ago, for example, it noted that batches of tetracycline HCl capsules which met official monograph requirements were not bioequivalent to a reference product. As you know, there is substantial literature on this subject affecting many drugs, including such antibiotics as tetracycline and erythromycin. The record on drug recalls and court actions affirms strongly that there are differences among pharmaceutical companies and their products. Research-intensive companies have far better records than those that do no research and may practice minimum quality assurance.**

---

*MYTH: Industry favors only "expensive" brand names and denigrates all generics.*

**FACT: PMA companies make 90 to 95 percent of the drug supply, including, therefore, most of the generics. Drug nomenclature is not the important point; it's the competence of the manufacturer and the integrity of the product that count.**

# Matters.

*MYTH: Generic options almost always exist.*

**FACT: About 55 percent of prescription drug expenditure is for single-source drugs. This means, of course, that for only 45 percent of such expenditure, is a generic prescribing option available.**

---

*MYTH: Generic prescriptions are filled with inexpensive generics, thus saving consumers large sums of money.*

**FACT: Market data show that you invariably prescribe—and pharmacists dispense—both brand and generically labeled products from known and trusted sources, in the best interest of patients. In most cases the patient receives a proven brand product. Savings from voluntary or mandated generic prescribing are grossly exaggerated.**

*MYTH: Drugs account for a major portion of the rise in health care costs.*

**FACT: Drugs represent a very small part of such costs. The amount of the health care dollar spent for prescription drugs was about 12 cents in 1967; today it is about 8 cents. And you as a physician are most conscious of how drug therapy can cut hospitalization, avert surgery, reduce office visits and keep patients on the job.**

---

*MYTH: Government intrusions into the marketplace will save tax money.*

**FACT: Government schemes always cost the taxpayer something, and the costs often exceed the benefits. Certainly, any federal "help," such as lists of wholesale drug prices sent to all physicians and pharmacists, will be no exception. Just think of the expense of keeping them current! Moreover, wholesale prices are poor guides to actual transaction prices and even worse guides to retail prices.**

## The PMA Position

We believe your freedom to prescribe, either by generic or brand name, should be totally unabridged. Otherwise, your prescribing prerogatives and your relationships with patients will be seriously impaired.

## The maker does matter

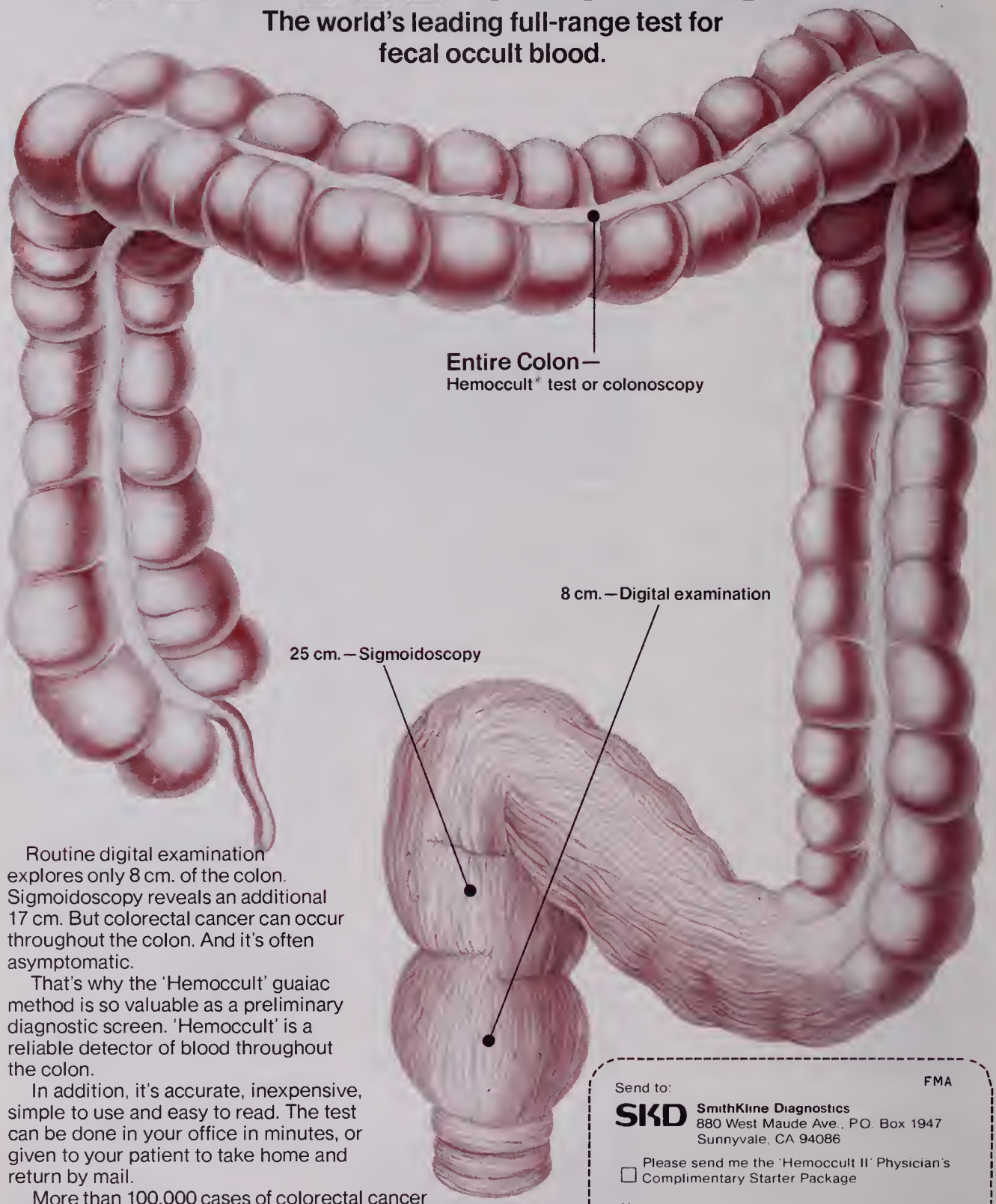
After the myths about price and equivalency have been shattered, one fact stands out more clearly than ever: *The maker does matter.* As always, your best guide to drug therapy for your patients is to select products—both brands and generics—from manufacturers with credentials and performance records you have come to respect.

PMA

Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D.C. 20005

# Hemoccult®

**The world's leading full-range test for fecal occult blood.**




Routine digital examination explores only 8 cm. of the colon. Sigmoidoscopy reveals an additional 17 cm. But colorectal cancer can occur throughout the colon. And it's often asymptomatic.

That's why the 'Hemoccult' guaiac method is so valuable as a preliminary diagnostic screen. 'Hemoccult' is a reliable detector of blood throughout the colon.

In addition, it's accurate, inexpensive, simple to use and easy to read. The test can be done in your office in minutes, or given to your patient to take home and return by mail.

More than 100,000 cases of colorectal cancer will occur in the United States this year. The earlier they are diagnosed, the greater the chances for successful treatment. Send for your free 'Hemoccult' starter package, today.

**'Hemoccult' is available through local distributors, nationwide.**

Send to: FMA

**SKD** **SmithKline Diagnostics**
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☐ Please send me the 'Hemoccult II' Physician's Complimentary Starter Package

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Phone _____

THE AUXILIARY BEEPER

FLORIDA MEDICAL ASSOCIATION AUXILIARY SPRING ISSUE 1979

# ARE YOU AWARE?

## FLAMPAC

By Valerie Kushner, Volusia County

Traditionally physicians and their families are loathe to engage in political activity which is related to the practice of medicine. Either they don't want to "soil their hands", or they feel that medicine and politics is an inappropriate combination. To speak to the latter point first; let me remind you that the most basic tenet of democracy is enlightened self-interest. Our Founding Fathers truly believed that an educated and informed populace, expressing their desires by means of the vote, could not fail to make the morally right decision. The major problem of modern politics is that our population is ill-informed and not voting.

Here are a few figures which should enlighten you of the extent to which the practice of medicine is already dependent upon the action of politicians. Of the total national expenditure for health care in 1940, only 15.3% was paid by public funds. In 1965, 20.8% was paid for by public funds. But in 1976, 40.2% of the total health care costs in this country were paid for by government monies. For the same years physicians received the following percentages of the total health care dollar: in 1940, 24.4%, in 1965, 21.6%; and 1976 18.9%. Yet, when you ask the health care consumer why medical costs are rising, a majority will put the blame on the "doctors".

I hope that I have aroused your self-interest enough to insert a commercial message. If you have not already replied to the recent request to join FLAMPAC, please do so now. Belonging to FLAMPAC will make you a part of a united and continuing effort to inform, educate, and enlighten those who distribute health care dollars to the needs of physicians in their goal of providing the best possible medical care for our nation.

One final note, Politics is not a science, it is an art. Like any art form it takes upon itself the characteristics of its creator. Political life in our country will be as clean or as dirty as the people who make it happen. That holds true all the way from the candidate to the envelope stuffer. You are already involved with your spouse's needs as a physician, you should be equally involved with the political determinants which restrict or enhance those needs. In doing so you will serve not only yourself and your family, but the larger community as well.

## ARE YOU INVOLVED?

By Connie Moore, FMAA FLAMPAC Chrm.

FLAMPAC, The Florida Medical Political Action Committee is a voluntary, non-profit, non-partisan, un-incorporated autonomous committee of individual physicians, their spouses and others who join by making annual voluntary contributions. FLAMPAC is not a branch of or subsidiary of any national or other political action committee. AMPAC is the American Medical Political Action Committee, an autonomous PAC whose objectives complement those of FLAMPAC.

Your support of the FLAMPAC program will help ensure that the medical profession is an effective participant in the legislative and election process, and that a large number of those elected will give the

*Continued on Page 8 . . .*

Are you aware of:

## TWO NEW SUCCESSFUL PROJECTS

The Hillsborough County Auxiliary has successfully promoted two very exciting new projects. Both of these projects are terrific public relations projects that some other counties may want to try.

Since they were interested in promoting pre-school immunizations, they contacted Nathan Praether in the HEW department in Hillsborough County. He gave them ideas on how they could best help with this program.

For the first project they organized a group of ladies to help them drive through two of the main thoroughfares of Tampa writing down the names and addresses of businesses with large marquees. A letter was then sent to these businesses asking them to help us help the public. It was explained to them about the immunization program and they were asked to put a short message on their marquees advising the public to immunize their children by contacting the Health Department or their doctor. They asked that this be done in June, July and August. A card was included for their response. Although 100% participation was not received, the general feeling was that the program was a complete and total success.

The second project was less time consuming. The Hillsborough Auxiliary paid for two plates with immunization messages to parents. These messages are appearing on milk cartons from Florida Dairy.

These plates can be used over and over again by any dairy that will participate.

In the future these auxilians plan to have a similar plate made which can be used on egg cartons.

For further information on these unique projects, you may contact Margaret Vizzi, 213 So. Sherrill St., Tampa, Fla. 33609.

Are you aware of:

## MEDITERRANEAN AIR/SEA CRUISE

The Florida Auxiliary is pleased to sponsor a fantastic trip departing September 25 for a two week luxury cruise aboard the MERMOZ. You'll fly by private chartered jet direct to the Mediterranean to board your floating hotel. You will enjoy deluxe shipboard accommodations, superb cuisine, exciting ports of call, non-regimented and care-free travel and much more.

Participate in shore excursions, shop for bargains, dine in elegance, enjoy nightly entertainment, dance until dawn, or just relax and enjoy the passing scene. The choice is yours.

Indulge yourself in a world where each meal is perfection . . . French cuisine in the finest Paquet tradition (and table wines are complimentary). Served in splendid dining salons that reflect the sunny beauty of the Riviera.

Some of the exciting ports of call include Nice-Villefranche; Livorno, Pisa, Florence; Civitavecchia-Rome; Sicily, Malta; Crete; Santorini; Rhodes and Piraeus/Athens.

You will return to the states on October 7, 1979.

*From "Who Am I, God?"*
*. . . Marjorie Holmes*

*Please heal and comfort and restore my beautiful battered country.*

*Let its waters flow clean again, God. Show us how to cleanse them.*

*Let its air be fit to breathe again, God. Give us ways, give us wisdom.*

*Let its poor gouged sides grow green again. Nurish its soil, which we starved or ruined in our greed. Arrent its cancerous tumors and blights of wastes and slums.*

*I pray this for he breath and body of America, Lord. I pray for its physical healing.*

*But I pray even more for its spirit.*

*Its character, God, that once stood strong as its forests, brisk and sure and sparkling as its waters. That too has been muddied by filth, wounded, debased, torn asunder. So that it reels before the world, bewildered and asking "Who am I" and fears to hear the answers.*

*My country, God — my decent, generous country that has sacrificed for others, poured out tides of blood and money — that it should come to this. Castigated. Hated. No, no I won't have it.*

*Oh God, give America back the strength it had as a young new nation, knowing who it was and crying its name with pride.*

*God, I pray for its very survival. My great and beautiful country that has given more freedom and a better life to more people than any other nation since the world began. Defend us from its attackers. Stay the hand of those who would destroy it.*

*Open their eyes to its wonders. Let them bear witness to its progress as well as its faults. Turn their energies to the task of building instead of burning.*

*Oh, God, don't let them take it away. Don't let them bring it down to destruction.*

*Surely you love America, God, or you would not have endowed it so richly. We are sorry for our failures, we repent, we are trying desperately to make amends. Please forgive us all that is past and help us.*

*Oh, God, please heal and restore my beloved country.*

# Newsbriefs From Around The State . . . .

### range County Medical Society Auxiliary

At their February General Meeting a Weight /atchers Luncheon was held with Bea Sherzer, /eight Watchers Area Supervisor, as speaker.

### roward County Medical Association Auxiliary, South Branch

These ladies enjoyed a delicious gourmet luncheon t the home of Candy Clark. A group of their girls repared an assortment of delicious vegetarian quiches nd other goodies. They enjoyed a speaker on the ubject of natural foods and microwave cooking. The ost of the luncheon was $10.00 and benefited the roward County Red Cross Emergency Assistance nd Food Program.

This branch is sponsoring their Fifth Annual Total hild Seminar. A distinguished panel spoke on topics uch as Reducing Stress in Parenting and Teaching"; elaxation Training, How to Reduce Stress the Bio- eedback Way" and Stress on Adults". Audience articipation was invited.

### apital County Medical Society Auxiliary

It was a beautiful, sunshiny day, as children and pouses cheered on the runners at Harriman Circle. he event was the first jogging event between nembers of physicians' families from Tallahassee and ainesville. Sandy White ran for first place in the vomen's 5000 meter race with a time of 24.17 inutes. Dorothy Brickler climbed out of "sick bed" o run 29.03; Nancy Dell Lawhorn was second with 4.44; and Linda Slade came out of a four month ogging retirement to run 29.40. Next year the /edical Challenge Cup will be held in Gainesville.

### lachua County Auxiliary

Pam Tetlow and her committee did a beautiful job n visiting 34 day care centers and nursery schools vith coloring sheets and posters, "Don't Let the Bugs ite You", part of the national immunization camp- ign sponsored by the AMA.

### Alachua County Medical Auxiliary

These ladies are very involved with their Baby sitting course. Nila Shaw and Rae Mangos are helping with this very worthwhile community project.

### St. John's County Women's Medical Auxiliary

Eighteen members of this auxiliary enjoyed a champagne and international cuisine luncheon in the home of Mrs. Anthony Mussallem. Gourmet dishes with an international flair were prepared by various members. Mrs. Semih Ulben prepared a special Turkish dish of chicken breasts with walnuts in conjunction with her slide presentation on the food, culture, and customs of Turkey. The Auxiliary also enjoyed viewing Mrs. Ulven's personal collection of treasures from her homeland.

### Seminole County Medical Society Auxiliary

The Seminole auxilians will use the Chamber of Commerce building to do Blood pressure and urine screenings for the public.

### Polk County Medical Association Auxiliary

A pictorial of the PCMA Physicians' Wives appeared in The Imperial Polk County Medical Association Bulletin. These busy auxilians are sponsoring a marathon at the Imperial Lakes Country Club in Lakeland. This is being held in conjunction with the Polk County Heart Association. In addition to the 10,000 meter run, there will be a two mile "run for fun".

### Sarasota County Medical Auxiliary, South Branch

A successful progressive dinner was held to benefit their scholarship fund. Three homes were used for the dinner with a cost of $15.00 per couple. John and Mary Soscia, Bob and Toni Ross and Rich and Lynn Paolillo were the gracious hosts and hostesses.

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### ARE YOU AWARE:

If overweight Americans lost those extra pounds, the total energy saved would equal 1.3 billion gallons of gasoline. Keeping off those extrapounds would supply the residents of Boston, Chicago, San Francisco, and Washington, D.C. with electricity for a whole year. That's what two University of Illinois researchers calculated, based on body weights obtained from a 1975 HEW health survey. (From Direct Line, November 1978)

### *A VIAL OF LIFE*

A vial of life can be found in many refrigerators in California. As part of an emergency identification program, senior citizens and the chronically ill who live alone place a small plastic vial containing pertinent information in their refrigerator, which is then marked with a red sticker. This way emergency medical technicians and paramedics have ready access to vital information.

# Wrap Up & Look Ahead

By Mrs. B.D. Epstein, President-elect

This past year has been a continuing educational process for me as I hope it has been for you on all levels of Auxiliary activity. Leadership Training and District workshops were based on your suggestions and your participation and attendance made them extremely successful. Thank you for your assistance and support. Looking ahead to 1979-1980 and our theme; "PEARLS OF WISDOM, Communication, Education, Motivation"; we your officers and board pledge our commitment to this end.

All meetings will be planned as "HOW TO". Meaning:

How to communicate: problems, concerns, common goals.

How to educate: increased knowledge of all areas of auxiliary on all levels including vital issues dealing with legislation and political education.

How to motivate: involvement at county, state and national levels.

We are part of 5000 in the state and 80,000 nationally. We can and must support organized medicine and this means being an informed member of the county, state and national auxiliaries. It is later than you think, the time has come for all of us to be involved.

Plan now to attend all meetings, confluences, training sessions, workshops and pick up a few pearls along the way.

## AMA–ERF UPDATE

By Candy Murray AMA-ERF

Under the theme of "FUN(ds) in the SUN", Florida continues to be a high-scorer for the Winning Team of AMA-ERF. Response to the Holiday Sharing Card was supurb this year, yielding over $52,000. A rising interest in personal cards and stationery boosted our profits by another $2,000. Several counties made an extra effort for ERF and deserve a special pat on the back: Orange--Art Auction; Escambia--Helen Corbitt Luncheon; Broward Central--Holiday Boutique; Lee--Fun(d) Day; Alachua--Professional Courtesy. To date Florida's total is over $61,000. Hats off to all!! Remember, awards will be given at the Annual Meeting in Hollywood.

In this time of inflation and pending governmental control, the importance of ERF support becomes paramount, both in unrestricted funds to medical schools and the loan guarantee fund. It is hoped that the auxilians and medical societies of Florida will continue to aid in this nationwide effort to keep medicine a private concern.

# THE THREE FACES OF EVE

By Marion Gillilanc

Like Eve, Auxiliary has three faces, three personalities, and three different specific behaviors. Like Eve Auxiliary is but a single body in spite of its various aspects.

In Eve's case, the three personalities are all housec in a single body made up of individual cells. In the case of the Auxiliary, the three levels are all housec in a single body of membership composed of individual members. The same cells house all three personalities of Eve. The same membership body houses all three levels of Auxiliary.

All three levels exist for a single purpose - to support medicine and to enhance its image, and each leve needs the others if we are to be effective in our efforts. Without the membership effort on the local level, where medicine is practiced and its image lives, where auxiliary supports the individual doctor and the individual hospital, where community needs are identified and met, Auxiliary would have no meaning.

Without the cooperation of the membership of related units (our 27 county auxiliaries) to share concerns and pool resources and ideas for meetin those concerns, without the leadership and coordination of members who are state leaders, the county auxiliaries would be much less effective in their grass roots efforts. And, certainly we would be much less effective in the legislative process.

In turn, the greater resources and pooled experience, the broader scope, and massed talents of the membership at the national level add greatness and effectiveness to the state and local auxiliaries and enhance the possibilities of success in programs and projects.

Ours is a democratic organization, with each member represented at each and every level. And because it it is a democratic organization, it is only as strong as its component units and its individual members. It is what we make it, what we want it to be. It offers us as individual members many things; a broad range of resources and well prepared materials to implement programs, exchange of proven ideas, stimulus from national and state meetings, the privilege of hearing renowned speakers who are experts in their fields. As individuals and as auxiliaries we share in the visibility with other groups and in national recognition for projects. As a unified organization at all levels we can make the voice of our 80,000 members a strong, unified voice speaking for the benefit of medicine and our communities. It is well worth our investment in time and money.

THE BEEPER

EDITOR . . . . . Jo Tignor

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# Creative Cuisine

Sponsored by The American Heart Association

By Janice Crawford, R.D.
Consulting Dietitian
merican Heart Association, Palm Beach County Chapter

The degree to which Americans eat out is astound-g - and also encouraging. Perhaps more than any odern society, ours is one which has pushed the oncept of dining outside the home to its furthest mits. It has all happened so quickly, and the changes ave been so dramatic, that we forget that only a few ief years ago homemakers were still looked down on if they didn't prepare three meals a day in their ery own kitchens. But since World War II, Americans ave revolutionized the way they eat, and it is doubt-l that we will ever go back to the old pattern. From n economic and sociological point of view, eating ut on a frequent basis seems to make sense for many f us, especially since approximately 50% of women f working age are employed outside the home. By ow it has become an intrinsic part of our way of fe.

And why not? Children always love it. There's othing that makes them happier than a new eating dventure. And more than ever, restaurants today e being designed with children in mind, so much so at it is easy to confuse an eating establishment with n amusement park. Women love it - of course. The roliferation of restaurants of all varieties has given veryone in the family choices which they never had efore.

Spending the day in the kitchen is no longer a neces-ity or a female obligation. There is a new mobility ere for everyone, a sense of greater alternatives. We ave never had so many options, so many eating xperiences-atmospheres, prices and styles of cuisine-o choose from. The development has been an xciting and liberating one, but it also creates a new ind of responsibility.

We are now eating one out of three meals outside he home. That means that our diet and the content f our food is in the hands of others. Restaurant wners, restaurant managers-chefs, waitresses, waiters-hose who serve the public have an enormous esponsibility. The public as a whole is finally oming to terms with health. There can be no doubt hat we want to live longer. And there can be no loubt that, when it comes to longer life, we see the eart as the heart of the matter. We want to be healthy; we want to have healthy hearts, and, at the same time, we want to continue to eat out often and enjoy the sort of food which we find most satisfying. In short, the public wants to be sensible about its diet. This is something which we each feel individually, and it is something which we feel as a nation.

At this point in our medical history, many agree that the heart is affected by excessive cholesterol and fat in the diet. True, a certain amount of cholesterol must always be present in our systems; it is necessary in order to maintain life. But when we eat too many rich foods in cholesterol and saturated fats, surplus cholesterol enters the bloodstream - and the results are all negative. Cholesterol deposits hinder the flow of blood; an artery may close off completely; clots can develop. There can be other complications and, in the end, there can also be heart attacks.

Controlling excessive calories, fats, or cholesterol is not a complicated matter. In fact, it is quite easy. It is a matter of first caring and then of doing something positive about it. And that's what the American Heart Association, Palm Beach County Chapter had in mind when Creative Cuisine was originated and implemented here in December of 1975. To our knowledge this was the only program of its kind being offered in the United States at that time. It was developed for restaurants and dining facilities in the chapter area, was adopted by the American Heart Association in 1978, and is now a nation-wide program.

The aim of the program is to identify menu items low in calories, fat and cholesterol for persons who are calorie conscious, nutrition oriented for better health, or who may be following a diet requiring such foods. It also will show that taste-tempting foods prepared with imagination and ingenuity can be low in calories, fat and cholesterol and add only pleasure to dining out.

In general, basic menus will not be changed. Instead, those items which already fall within the guidelines of the program will be emphasized. These suggestions are indicated by placing a CREATIVE CUISINE logo on the menu next to recommended items. Some managers may choose to add entrees to their existing menus or use a separate menu with only Creative Cuisine items.

Several restaurants in the chapter area are modifying their menus and, at the same time, raising the public's awareness of certain kinds of healthy and also quite delicious foods.

The key word here is awareness. Often a meal will actually taste better if it is prepared with low fat, low cholesterol ingredients. It is a matter of getting that information to the right people, and that's what Creative Cuisine is all about.

Creative Cuisine is a total program, a program designed to involve the restaurant manager, the chef, the waither and/or waitress, and the patron. Restaurant managers have responded enthusiastically. Several Creative Cuisine items have been identified and

new menus have been developed. The chefs have been advised of ways to buy, modify ingredients, and prepare appetizing foods which, in the final analysis, are healthier. The waiters and waitresses have been advised, so that they can suggest Creative Cuisine dishes to their patrons. Patrons are provided with a patron's brochure which provides some helpful hints on eating out. There are cards being placed on the tables of participating restaurants, explaining the positive thrust of Creative Cuisine.

The Heart Association sponsors and monitors the program, and provides assistance and materials necessary to implement the program.

Of course Creative Cuisine is not something which should last a week or a month. It should - and it must - last a lifetime. Like eating out, Creative Cuisine should be made part of our national habits. It should become natural. Often the choices are simple - margarine on your bread, and not butter; a baked potato and not French fries; fresh fruit for dessert; skim or low fat milk; having your meat or fish broiled; moderate meat portions. But over a long period of time, these differences can take on monumental importance, and often be the key to a longer and healthier life.

Such changes - even if they are entirely for the good - take time, we understand that. But we're convinced that the time to begin realizing those changes, to begin improving our eating habits is now.

Creative Cuisine is an entirely new concept in dining and its success depends on the dedication of the participants to the better health of their patrons as well as to the better business of their operation.

## HIGHLIGHTS - LEADERSHIP CONFLUENCE

By: Charlotte Fixel

Dr. Tom Nesbitt is the President of the American Medical Association for 1978-1979. The following is a resume of the speech he gave to the Confluence.

Right after World War II, the medical profession undertook to create the most advanced techniques in the medical profession, that the world has ever know. It developed Specialty Boards and poured billions of dollars into developing types of medicine and techniques which could never have been available 25 years ago. We have made advances in field organ transplants and by-pass surgery and in all of the progressive measures that have contributed so greatly to man's longevity. We endeavored to make high quality care available to meet the needs and demands of the American people.

Some of the factors that have caused escalation of prices in the medical field are inflation; more persons owning insurance policies than ever before; additional demand for services; government care guaranteeing health care to a large segment of our population; demand created by an aging population. Thirty percent of the health care dollar went to over 65 population and that's not going to diminish. Many of these costs a inescapable.

The Medical Profession had commissioned a in-depth study three years ago regarding wh these costs have gotten out of hand and wh could be done about this situation. We o ganized programs monitoring our hospita with committees in every state, to begin wh has become known as the voluntary effort.

The third largest industry in this countr right behind construction and agriculture, a industry that accounts for expenditures of 16 to 180 billions a year, has successfully bee cutting its costs and reducing the rate escalatio of hospital expenditures almost twice as muc as was expected by the medical coalition.

Dr. Nesbitt, also decided to generate a Dialogu with the corporate business world, so the identified the top 50 of Fortune Magazine's to 500 corporations; and in four to five months, the met with the leaders of 29 of the nation's to corporations. With all this activity working i medicine's behalf, they feel they have a goo story to tell. They feel also they need the help o the Auxiliary and of the whole medical professio

We need to have an understanding of the dept and the breadth of what is happening in America Medicine. It is important that everyone know w are not working just for ourselves in a self-servin manner.

## WANDA IS OUR GIRL!

The Florida Medical Associa tion Auxiliary is most fortunat to have among its ranks, Mrs Robert McDermon, (Wanda) Wanda's official title is Di ector of Special Services o the Florida Medical Associa tion. She will have bee employed 5 years by the FM in June. As she says "I lov every minute of it and am mos grateful to the FMA and FMA for such a fantastic job'

Wanda was born in Lyons, Georgia. She attende elementary school in Miami and attended junio and senior high school in Jacksonville. She wa married to her Florida Highway Patrol Troope husband, Bob, on July 7, 1967. They are th parents of two children Robin, 9 years old an Patrick who is 5 years old.

In her free time Wanda loves to cook, especiall Italian food and entertain lots of people . . . She is currently involved in buying and movin into a new home in Jacksonville.

Wanda, the auxiliary does really appreciate al of your efforts in their behalf and most particul ary the promptness withwhich you carry out ou requests. You are indeed indispensable.

## SPOTLIGHT

Mrs. Bergon F. Brokaw (Buddy)

Buddy Brokaw is a Lake County auxilian with nitless energy. She is the wife of Dr. Bergon F. okaw, a Family Physician in Leesburg. The Brokaws ive two married sons, Bergon F. Brokaw, II, who is CPA in Lakeland and Barry, who lives in St. Louis, o. and works in Hotel Management. She is the proud andmother of a two year old grand daughter and a vo year old grandson.

Buddy Huxford Brokaw spent her childhood and outh years between Florida and Indiana. She is a aduate of Indiana State University with degrees in hysical Education, Music and Elementary education. he taught First Grade at So. Miami Elementary and ee Elementary in Leesburg.

Buddy and Bergon were married in 1942 while he as accomplishing one of his three ambitions; that is, be a Navy pilot. After serving 15 years in the Navy, pursued the second ambition to become a phycian. He is a member of the "Silver Eagles Associaon (which is limited to qualified pilots who were ented pilots before being commissioned officers in the .S. Navy.) They have resided in Leesburg since 1960.

Buddy has been involved in many community, edical and religious activities. She was named "1977 oman of the Year" by the Lakes Business and Prossional Womans Club. She is the recipient of several vards from the American Cancer Society, and was warded the "Meritorious Service Award" from the entral Florida Heart Association.

Her husband's aviation interests are uppermost in er mind. In this regard she has shared two awards ith her husband for their airplane "Brokaw Bullet". hese awards are "Most Unique combination--Man nd Machine Award" and "Best Original Design omebuilt."

Buddy is the author of "Health Careers in Florida's Vocational Technical Centers and Community Colleges." She is currently in the process of updating this book. Additionally, she is currently writing "Information Manuel" (50 page Booklet) on the "Brokaw Bullet".

Buddy has served the Auxiliary in many ways including county president, but she has been primarily involved in the Health Careers field for the past 16 years. She has been State Health Careers Chairman for the last three years.

Adding to her already busy agenda Buddy has joined a Genealogy Group and is searching for her family history.

Buddy is certainly a dynamic and important member of her family and community. Her warmth and friendliness are never forgotten.

ARE YOU AWARE OF THE
## SOUTHERN MEDICAL WINNER

Congratulations to Polk County, Florida upon winning the Doctor Guy Smith Kirby-Doctors Day Award from the Southern Medical Association Auxiliary during their annual meeting in November in Atlanta, Ga. They were the recipients of the second place trophy-1978-Southern Region for Doctors' Day Scrapbooks.

## *AUXILIARY GETS THANKS*

"I would like to take this opportunity to thank the Woman's Auxiliary to the Palm Beach County Medical Society for the help they so readily gave me when I was so in need.

I know that $150 might not sound like much to a working person, but to a mother of three small children with no other income than a welfare check, it was a Godsend.

I would like you to know that your help was responsible for removing my family from the welfare roles of this state. I no longer participate in the Food Stamp Program either, although I still qualify to receive them.

I go to work each night with a sense of fulfillment and pride that I never had before, and an eagerness to accept the challenges that I know await my skills as a nurse.

I enjoy my job and do my very best to bring honor to my profession."

*THE YEAR IN REVIEW - FROM PAT*

Dear Auxiliary Members:

As this administration draws to a close I want to thank you for the privilege of serving you as your president. It has been an unforgettable experience - the work,the challenges, the pleasures, the fellowship, the pride in your accomplishments - so many things. You have been my inspiration, you have encouraged me and aided me. You will always be in my heart.

I am looking forward to Convention and am confident that once again your participation will make this an exciting, enjoyable and beneficial meeting. Reports from around the state are proving that you have outdone yourselves in accomplishments and the Awards Luncheon is bound to be glorious.

Again, thank you for one of the most outstanding years of my life. May God be with you and with the Auxiliary that it may go forward to even greater heights of service.

# CHICAGO-CHICAGO

The 56th Annual Convention of the AMA Auxiliary will convene in Chicago July 22-25, 1979 at the Drake Hotel. Several two-hour workshops will be planned for Saturday, July 21. The workshops will be led by the 1979-80 membership, legislation, AMA-ERF, and health projects committees. The hotel reservation form was featured on the back cover of the Winter Issue of Facets.

Give serious thought to attending this fine meeting. Chicago is a super city. Its architecture is some of the finest; its history, long and interesting; its sights, well worth seeing; it's toddlin', it's razzmatazz, it's Chicago, and it's your kind of town.

*Are You Involved? Continued . . .*

profession a fair hearing on legislative issues. Candi dates are chosen for support based upon the votin record and indicated support of the views of medi cine. The County Medical Communities are assure participation in the decision making process througl Candidate Selection Committees or Political Educa tion Committees appointed or chosen by the leader ship in that community. It is important therefore that physicians and their spouses have good commun cation through serving on such a committee.

Your support of the FLAMPAC program will hel ensure that members of our medical community ar informed and knowledgable about candidates and up coming elections. The members of the FLAMPA Board of Directors are appointed by the FMA Boar of Governors to serve for a period of one year. Th Board consist of seven members who shall be doctor of medicine who are members of the FMA an FLAMPAC, one member who is a member of th FMA Auxiliary and FLAMPAC, and one membe who is a member of the Board of Governors of th FMA and FLAMPAC and will serve as FMA liaiso officer. All Board members serve without compensa tion.

The Candidate Advisory Board for National Elect ions, composed of a medical doctor from each o Florida's 15 congressional districts, advises the Boar of Directors on matters relating to national elections including evaluation of candidates who are seekin national elective office.

The Candidate Advisory Board for State Elections presently composed of 22 members, performs i state elections the same function as the Candidat Advisory Board for National Elections.

The FMA Auxiliary and the FMA Auxiliary' FLAMPAC committee are separate. As an Auxiliar and a not for profit organization, the law of th land quite clearly states that. As a citizen, as Doctor's spouse, as an interested and intelligen member of the community it is our responsibility an our priviledge to participate in the politics of ou country . . . You and I may not always agree with th decisions made by the Board (and I am on the Board however, I believe it is important for you to know th procedure followed in the allocation of campaig monies. If you have strong convictions for or agains a candidate it is important that you contact you local committee. It is the responsibility of the Boar of Directors of FLAMPAC in making the final de cision, to consider the things I have mentioned above we are charged with spending your money on the can didate that share the same philosophy and ideals o the freedom to practice medicine and the freedom to choose my own physician. Join your only politica action committee - "The person who says that he is above politics is really saying that democracy is be neath him".

# HAPPINESS

# IS

# ACCEPTANCE

By Anne Swing

Is your Auxiliary a warm, friendly group meeting he needs of its members? Are you allowing for the ndividual differences and intrinsic capabilities of ach auxilian? If not, you are missing the boat in nembership retention!

None of us were born doctor's spouses. We come rom varying economic backgrounds, educational ystems, professional experiences, ethnic and religious nfluences, family situations, and age groups. These ifferences make us unique and interesting to others. rying to force all members into the same mold is a reat mistake because they will not fit comfortably. f one is not happy in an imposed role, the natural hing to do is rebel and escape to a more suitable ituation. What better way to lose members?

Accept each person where she is and as she is when he joins your Auxiliary. Determine where her inerests and capabilities lie and then put them to use in ttaining our prime objectives of promoting improved ommunity health and fostering friendship among loctors' families.

An Auxiliary meeting should be like a family athering - an occasion where each person is warmly reeted and made to feel completely at ease. The pinions of all should be valued, and the feelings of ll considered. If members are absent, someone hould let them know that they were missed. Doctors' pouses will be apt to choose Auxiliary in preference o the many other organizations competing for their ttention, if Auxiliary offers the most fertile ground or development of their God-given talents. Our rganization needs these talents if it is to remain imely and effective.

The method of detecting individual capabilities nd interests will vary from county to county. But ne thing is certain! You must contact potential members as soon as they come to your community - r, if possible, prior to their arrival. Help them with he problems of settling in a new town.---finding ousing, shopping places, baby sitters, handymen,etc. Don't make them depend entirely upon the Yellow Pages. Use a personal one to one approach, so that the newcomer has a human link to the unfamiliar surroundings. Each auxilian is a part of the membership team and should take it as a serious responsibility. If the "new gal in town" is of foreign extraction, one of the members who hails from the same part of the world could act as sort of a "big sister". bringing her new friend to meetings and familiarizing her with local customs. It is good for the contact person to be in the same general age bracket as the potential member. Age is no barrier in Auxiliary life. We need the energy and fresh ideas of youth and the invaluable experience of age.

It would be ludicrous to regard members only in light of what they can do for the organization. Our real purpose of existence is to help each other as we strive together to achieve the prime objectives mentioned earlier. We rejoice with one another in happiness and successes, but more importantly we show concern and consideration in times of illness or distress. This is the test of the family spirit of your Auxiliary.

In travelling throughout Florida, it is gratifying to see the warmth and kindness exhibited in our county Auxiliaries. It is a spirit of which you can be truly proud, and one which you should endeavor to share with every doctor's spouse in your community.

## 1978 LEADERSHIP CONFLUENCE
### Leadership Seminar

#### FUTURE PLANNING LONG AND SHORT-RANGE

FACULTY:

Bruce Balfe, Director AMA Dept. of Long-Range Planning.

John B. Wyatt, Supervisor Manpower Development, AMA Dept. of Employee Relations.

Both short-term and long-term planning can help an organization determine what it wants to accomplish and the best way of achieving it's goals. This Seminar showed that effective planning can be done informally and simply without the use of computers and sophisticated forecasting. What do you want your organization to be? Good leaders do not get too far ahead of the group. Planning is hard work because choices and decisions have to be made. Planning committees should brain-storm and screen these ideas, then research ideas. Develope an action plan by identiying task; set up a time table; identify possible pitfalls and fortify;make assignments; expect accountability; and finally assessment. FIT PEOPLE TO THE ASSIGNMENT. Don't just fill the job. Lay a good foundation.

## INTERPLAST EAST

Interplast East takes great pride in announcing that they ended the year of 1978 with caring for 10 children and one adult patient. The adult was their first adult patient and was a 30 year old male burn victim. They are quite proud of all the work done and it could not have taken place without the generous support of the foster parents, doctors, and hospital staff at North Beach Medical Center and Cypress Hospital in Ft. Lauderdale. Quoting from the Interplast East newsletter, "I should mention the generous support that came from the Florida Medical Association Auxiliary and without our fairy godmother Mae White . . . none of this could have been possible."

Interplast East has of this date (counting the newest child, Anna Marie who arrived on a stretcher and is undergoing many surgical procedures) helped 19 persons on their way to living a normal and productive life.

Interplast, Inc. a non-profit organization for international reconstructive surgery, has performed over 1600 surgeries in Latin America, Western Samoa, and Africa, enabling indigent patients to overcome birth deformities, accidents, burns and functional disabilities.

Physicians, surgeons, anesthesiologists, dentists and nurses donate their services, airlines provide transportation, pharmaceutical companies contribute medical supplies, foster families provide free care and cross-cultural assistance to those patients whose complex surgery must be performed in the U.S. and volunteers provide administrative support.

Dr. and Mrs. Franklin D. Ott of Pompano Beach along with their friend, Mae White, were primarily responsible for getting Interplast East on its way. Dr. William Hogan was the first surgeon to work with the group. Dr. Richard F. Ott who started them all on this project will be joining the staff of Dr. Charles Bonura and Dr. Vernon Turner in July to assist with this rewarding project. Thank yous are certainly in order to these fine men and all of the others that have been so actively involved in this project.

The Vice-President of Interplast East, Ann Lombard wishes to thank all of the members of the FMA/A for their generous help. As Ann says and I quote "You are restructuring a life--how tremendous it is!" Current plans are that several of the patients that have been helped will pay the auxiliary a visit at the annual meeting in May. Something really to look forward to.

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(813) 896-7678

Beltone Hearing Aid Service
6221 14th Street, West
Bayshore Building 105
Bradenton, Florida 33507
(813) 755-5484

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WORLD LEADER IN HEARING AIDS AND HEARING TEST INSTRUMENTS

**ELECTRONICS CORPORATION**

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# FROM THE EDITOR'S DESK

## KILPATRICK TO ADDRESS ANNUAL MEETING

James J. Kilpatrick, well known conservative television commentator and newspaper columnist, has accepted an invitation to speak at the 105th Annual Meeting of the Florida Medical Association. Mr. Kilpatrick will present the annual Baldwin Lecture on Friday, May 25, at the Diplomat Hotel in Hollywood, Florida, beginning at 11:00 a.m.

## HOUSE OF DELEGATES

The House of Delegates will meet three times during the Annual Meeting. The opening session is scheduled for 4:30 p.m. on Wednesday, May 23. The second and third sessions will be at 3:00 p.m. on Saturday, May 26, and 9:00 a.m. on Sunday, May 27. Five reference committees will hear testimony on all reports and resolutions on Thursday morning, May 24. Sunday's final session of the House will feature the installation of Richard S. Hodes, M.D., of Tampa, as President to succeed O. William Davenport, M.D., and the election of other Association officers for the coming year.

## SCIENTIFIC PROGRAM

The Annual Meeting Scientific Program will be conducted on Wednesday and Thursday afternoons, Friday morning and afternoon, and Saturday morning. The program has been approved for 20 hours of AMA Category I Credit, and 20 hours of FMA Mandatory Credit. Portions of the program are acceptable for American Academy of Family Physicians Prescribed Credit.

## MEDIATION PANEL QUESTIONNAIRES

Some Florida physicians have raised questions about questionnaires that potential mediation panel members are asked to fill out. The purpose of the questionnaire is to obtain information regarding the prospective panelist's education, background and experience as well as to uncover any connection with any of the parties to the claim submitted for mediation. The law requires that these forms be filled out promptly and returned to the county medical mediation clerk.

## IMPAIRED PHYSICIANS

FMA county medical societies have been urged to devise a mechanism to provide emergency assistance for impaired physicians suffering from alcohol or drug addiction or other disabilities. The FMA Judicial Council is expected to offer a statewide program in this important area soon.

## STUDY OF MALPRACTICE CLAIMS

Physicians sued for malpractice generally win nine out of every 10 cases that go to court. That is one of many facts included in a compilation of 16,592 malpractice claims closed since July 1, 1976, published by the National Association of Insurance Commissioners. The report, NAIC Malpractice Claims, gives details on the specialties involved in the claims closed by 100 insurers, various diagnoses and procedures, and the types of mistakes that occurred. The report also says that the average time between injury and claim settlement has increased from 36 to 42 months.

## HMO STUDY

The AMA has launched what is termed an objective assessment of Health Maintenance Organizations (HMOs). The AMA Council on Medical Service and the Department of Professional Review will look particularly at the impact of HMOs on the quality, availability and cost of health care. Fifteen HMOs will be visited and administrators, physician members, subscriber group representatives and non-HMO physicians will be interviewed.

## ORAL ANTIDIABETIC DRUGS

The University Group Diabetes Program's controversial study of oral antidiabetic drugs will be reviewed by the AMA Council on Scientific Affairs. The UGDP, a program initiated in 1961 and funded by the National Institutes of Health, has released findings suggesting an increased cardiovascular mortality risk among patients using these drugs. The American Diabetes Association has questioned the study.

## GROUP FAILURES

Why did one of every four group practices operating in 1969 fail by 1975? The AMA's Center for Health Services Research and Development is trying to find out. The failure rate is slightly less than that of other small businesses, the Center said, but it represents a substantial disruption of medical services in many communities. Least likely to fail, the Center found, were group practices with corporate ownership, with an executive board to determine policy, with group ownership of facilities, and with a central records system. The study is being extended to 1980.

## PSRO

The Department of Health, Education and Welfare figures that Professional Standards Review Organizations effected a net savings of $5 million in health care expenditures in 1977. HEW estimates that PSROs in 96 areas of the nation saved $50 million in 1977 by eliminating unnecessary hospital days; but they spent $45 million reviewing care. According to HEW the 96 PSRO areas showed 1.5 fewer hospital days per Medicare beneficiary compared with hospital stays in non-PSRO areas.

**The Editor**

# Dean's Page

# A Proposed Comprehensive Cancer Center at the University of South Florida Medical Center

**Hollis G. Boren, M.D.**

Rarely does a Medical Center have the opportunity to make a significant contribution to health care and medical education such as that afforded by the proposed Comprehensive Cancer Center at the University of South Florida Medical Center. Several factors converge to give a unique situation. First, the State of Florida has the highest death rate from cancer of any state in the union (237/100,000 population) and in Central Florida this rate is even higher 256/100,000 population). Second, this year financial resources of the State of Florida are such that it is possible to support a onetime capital outlay to build new facilities. Third, a commitment to cancer at this time in the development of the Medical Center at the University of South Florida will provide the necessary environment to develop a truly superb Comprehensive Cancer Center. The resulting benefits to patients, the community and medical education will be significant. This effort is being led by an able and effective legislator, State Representative Lee Moffitt. Solid support by our state legislators will make the Comprehensive Cancer Center a reality. I hope that we shall have the support of the Florida Medical Association in this worthwhile endeavor.

The need for a Comprehensive Cancer Center in West Central Florida is great indeed. At the present time there are 3.2 million persons within a distance of 100 miles of the University of South Florida Medical Center. In this area there are 8,300 deaths from cancer per year, 15,000 new patients with cancer per year, and a cancer prevalence of 65,000 cancer patients. The number of cancer patients are projected to continue to increase each year for the forseeable future. Such figures confirm our clinical observations and provide a quantitative measure of the magnitude of the cancer problem in this area.

Our proposal is to build the physical facility as an integral part of the Medical Center bringing together in one place the faculty and support personnel with commitment and expertise in oncology, the special diagnostic and therapeutic modalities required by cancer patients and the most advanced basic science and clinical research activities which are at the heart of advances in cancer. We will strive for equal recognition of the humanistic and scientific problems inherent in compassionate, competent management of cancer patients and their families. We will do this in such a manner that the Comprehensive Cancer Center will become the model for education for students of medicine and nursing, for graduate health professionals and paraprofessionals.

Such high goals will not be achieved easily. But then very few, if any, worthwhile endeavors are ever accomplished without great labor, many sacrifices and commitment of many persons. The membership of the Florida Medical Association has always given magnificent support to the University of South Florida Medical Center for which we are justifiably proud. With your continued support we will be able to achieve a greatly enhanced level of service.

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Dr. Boren is Director of the University of South Florida Medical Center and Dean of the College of Medicine, Tampa.

• Dr. Boren, University of South Florida, Tampa 33612.

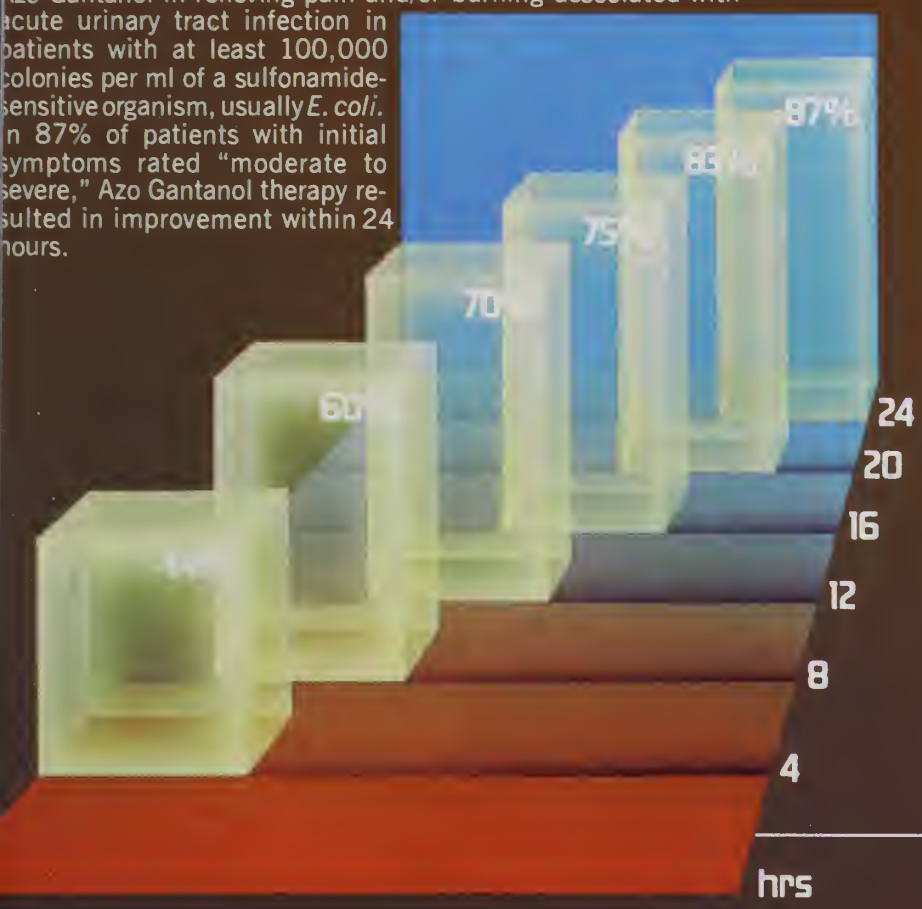


The opinions stated on this page are those of the individual Deans and do not necessarily represent the policy of the FMA

mportant data on the pain of acute cystitis:

# n 87% of patients studied [303 of 349], Azo Gantanol® reduced pain and/or burning within 24 hours*

A controlled, multicenter study assessed the efficacy of Azo Gantanol in relieving pain and/or burning associated with acute urinary tract infection in patients with at least 100,000 colonies per ml of a sulfonamide-sensitive organism, usually *E. coli*. n 87% of patients with initial symptoms rated "moderate to severe," Azo Gantanol therapy resulted in improvement within 24 hours.




Fast pain relief plus effective antibacterial action

# Azo Gantanol®

Each tablet contains 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl.

for the pain

for the pathogens

Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey 07110

**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications:** In adults, urinary tract infections complicated by pain (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis*, and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. **Note: Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides.** Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

**Contraindications:** Children below age 12; sulfonamide hypersensitivity; pregnancy at term and during nursing period; because Azo Gantanol contains phenazopyridine hydrochloride it is contraindicated in glomerulonephritis, severe hepatitis, uremia, and pyelonephritis of pregnancy with G.I. disturbances.

**Warnings:** Safety during pregnancy not established. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy.

**Precautions:** Use cautiously in patients with impaired renal or hepatic function, severe allergy, bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

**Adverse Reactions:** *Blood dyscrasias* (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia); *allergic reactions* (erythema multiforme, skin eruptions, Stevens-Johnson syndrome, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); *G.I. reactions* (nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); *CNS reactions* (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous reactions* (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon). Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

**Dosage:** Azo Gantanol is intended for the acute, painful phase of urinary tract infections. *Usual adult dosage:* 2 Gm (4 tabs) initially, then 1 Gm (2 tabs) B.I.D. for up to 3 days. If pain persists, causes other than infection should be sought. After relief of pain has been obtained, continued treatment with Gantanol (sulfamethoxazole) may be considered.

*NOTE:* Patients should be told that the orange-red dye (phenazopyridine HCl) will color the urine.

**Supplied:** Tablets, red, film-coated, each containing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl—bottles of 100 and 500.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

# A reminder

# ZYLOPRIM®

## (allopurinol)

100 and 300 mg scored Tablets

- inhibits uric acid formation
- helps prevent urate crystal depositions in synovia
- reduces risk of uric acid lithiasis

**INDICATIONS AND USE: This is not an innocuous drug and strict attention should be given to the indications for its use. Pending further investigation, its use in other hyperuricemic states is not indicated at this time.**

Zyloprim® (allopurinol) is intended for:

1. treatment of gout, either primary, or secondary to the hyperuricemia associated with blood dyscrasias and their therapy;
2. treatment of primary or secondary uric acid nephropathy, with or without accompanying symptoms of gout;
3. treatment of patients with recurrent uric acid stone formation;
4. prophylactic treatment to prevent tissue urate deposition, renal calculi, or uric acid nephropathy in patients with leukemias, lymphomas and malignancies who are receiving cancer chemotherapy with its resultant elevating effect on serum uric acid levels.

**CONTRAINDICATIONS:** Use in children with the exception of those with hyperuricemia secondary to malignancy. The drug should not be employed in nursing mothers.

**Patients who have developed a severe reaction to Zyloprim should not be restarted on the drug.**

**WARNINGS:** ZYLOPRIM SHOULD BE DISCONTINUED AT THE FIRST APPEARANCE OF SKIN RASH OR ANY SIGN OF ADVERSE REACTION. In some instances a skin rash may be followed by more severe hypersensitivity reactions such as exfoliative, urticarial and purpuric lesions as well as Stevens-Johnson syndrome (erythema multiforme) and very rarely a generalized vasculitis which may lead to irreversible hepatotoxicity and death.

A few cases of reversible clinical hepatotoxicity have been noted and in some patients asymptomatic rises in serum alkaline phosphatase or serum transaminase have been observed. Accordingly, periodic liver function tests should be performed during the early stages of therapy, particularly in patients with pre-existing liver disease

Patients should be alerted to the need for due precautions when engaging in activities where alertness is mandatory.

Nevertheless, iron salts should not be given simultaneously with Zyloprim. This drug should not be administered to immediate relatives of patients with idiopathic hemochromatosis.

**In patients receiving Purinethol® (mercaptopurine) or Imuran® (azathioprine), the concomitant administration of 300-600 mg of Zyloprim per day will require a reduction in dose to approximately one-third to one-fourth of the usual dose of mercaptopurine or azathioprine. Subsequent adjustment of doses of Purinethol or Imuran should be made on the basis of therapeutic response and any toxic effects.**

*Usage in Pregnancy and Women of Childbearing Age:* Zyloprim® (allopurinol) should be used in pregnant women or women of childbearing age only if the potential benefits to the patient are weighed against the possible risk to the fetus.

**PRECAUTIONS:** Some investigators have reported an increase in acute attacks of gout during the early stages of allopurinol administration, even when normal or subnormal serum uric acid levels have been attained.

It has been reported that allopurinol prolongs the half-life of the anticoagulant, dicumarol. This interaction should be kept in mind when allopurinol is given to patients already on anticoagulant therapy, and the coagulation time should be reassessed.

A fluid intake sufficient to yield a daily urinary output of at least 2 liters and the maintenance of a neutral or, preferably, slightly alkaline urine are desirable to (1) avoid the theoretic possibility of formation of xanthine calculi under the influence of Zyloprim therapy and (2) help prevent renal precipitation of urates in patients receiving concomitant uricosuric agents.

Patients with impaired renal function require less drug and should be carefully observed during the early stages of Zyloprim administration and the drug withdrawn if increased abnormalities in renal function appear.

In patients with severely impaired renal function, or decreased urate clearance, the half-life of oxipurinol in the plasma is greatly prolonged. Therefore, a dose of 100 mg per day or 300 mg twice a week, or perhaps less, may be sufficient to maintain adequate xanthine oxidase inhibition to reduce serum urate levels. Such patients should be treated with the lowest effective dose, in order to minimize side effects.

Mild reticulocytosis has appeared in some patients.

As with all new agents, periodic determination of liver and kidney function and complete blood counts should be performed especially during the first few months of therapy.

**ADVERSE REACTIONS:**

*Dermatologic:* Because in some instances skin rash has been followed by severe hypersensitivity reactions, it is recommended that therapy be discontinued at the first sign of rash or other adverse reaction (see WARNINGS). Skin rash, usually maculopapular, is the adverse reaction most commonly reported.
Exfoliative, urticarial and purpuric lesions, Stevens-Johnson syndrome (erythema multiforme) and toxic epidermal necrolysis have also been reported.
A few cases of alopecia with and without accompanying dermatitis have been reported.
In some patients with a rash, restarting Zyloprim (allopurinol) therapy at lower doses has been accomplished without untoward incident.

*Gastrointestinal:* Nausea, vomiting, diarrhea, and intermittent abdominal pain have been reported.

*Vascular:* There have been rare instances of a generalized hypersensitivity vasculitis or necrotizing angiitis which have led to irreversible hepatotoxicity and death.

*Hematopoietic:* Agranulocytosis, anemia, aplastic anemia, bone marrow depression, leukopenia, pancytopenia and thrombocytopenia have been reported in patients, most of whom received concomitant drugs with potential for causing these reactions. Zyloprim® (allopurinol) has been neither implicated nor excluded as a cause of these reactions.

*Neurologic:* There have been a few reports of peripheral neuritis occurring while patients were taking Zyloprim. Drowsiness has also been reported in a few patients.

*Ophthalmic:* There have been a few reports of cataracts found in patients receiving Zyloprim. It is not known if the cataracts predated the Zyloprim therapy. "Toxic" cataracts were reported in one patient who also received an anti-inflammatory agent; again, the time of onset is unknown. In a group of patients followed by Gutman and Yü for up to five years on Zyloprim therapy, no evidence of ophthalmologic effect attributable to Zyloprim was reported.

*Drug Idiosyncrasy:* Symptoms suggestive of drug idiosyncrasy have been reported in a few patients. This was characterized by fever, chills, leukopenia or leukocytosis, eosinophilia, arthralgias, skin rash, pruritus, nausea and vomiting.

**OVERDOSAGE:** Massive overdosing, or acute poisoning, by Zyloprim has not been reported.

**HOW SUPPLIED:** 100 mg (white) scored tablets, bottles of 100 and 1000; 300 mg (peach) scored tablets, bottles of 30, 100 and 500. Unit dose packs for each strength also available.

*Complete information available from your local B. W. Co. Representative or from Professional Services Department PML.*

U.S. Patent No. 3,624,205 (Use Patent)

Wellcome

**Burroughs Wellcome Co.**
Research Triangle Park
North Carolina 27709

# Does it influence your choice of a peripheral/cerebral vasodilator*?

- Vasodilan—compatible with coexisting diseases
- Vasodilan—compatible with concomitant therapy
- Vasodilan—compatible with your total regimen for vascular insufficiency

***Indications:** Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, the FDA has classified the indications as follows:

Possibly Effective:

1. For the relief of symptoms associated with cerebral vascular insufficiency.
2. In peripheral vascular disease of arteriosclerosis obliterans, thromboangiitis obliterans (Buerger's Disease) and Raynaud's disease.

Final classification of the less-than-effective indications requires further investigation.

**Composition:** Vasodilan tablets, isoxsuprine HCl, 10 mg. and 20 mg.
Vasodilan injection, isoxsuprine HCl, 5 mg., per ml.

**Dosage and Administration:** Oral: 10 to 20 mg., three or four times daily.
Intramuscular: 5 to 10 mg. (1 or 2 ml.) two or three times daily. Intramuscular administration may be used initially in severe or acute conditions.

**Contraindications and Cautions:** There are no known contraindications to oral use when administered in recommended doses. Should not be given immediately postpartum or in the presence of arterial bleeding.

Parenteral administration is not recommended in the presence of hypotension or tachycardia.

Intravenous administration should not be given because of increased likelihood of side effects.

**Adverse Reactions:** On rare occasions oral administration of the drug has been associated in time with the occurrence of hypotension, tachycardia, nausea, vomiting, dizziness, abdominal distress, and severe rash. If rash appears the drug should be discontinued.

Although available evidence suggests a temporal association of these reactions with isoxsuprine, a causal relationship can be neither confirmed nor refuted.

Administration of single dose of 10 mg. intramuscularly may result in hypotension and tachycardia. These symptoms are more pronounced in higher doses. For these reasons single intramuscular doses exceeding 10 mg. are not recommended. Repeated administration of 5 to 10 mg. intramuscularly at suitable intervals may be employed.

**Supplied:** Tablets, 10 mg., bottles of 100, 1000, 5000 and Unit Dose; Tablets, 20 mg., bottles of 100, 500, 1000, 5000 and Unit Dose; Injection, 10 mg. per 2 ml. ampul, box of six 2 ml. ampuls.

U.S. Pat. No. 3,056,836

# VASODILAN®
## (ISOXSUPRINE HCl)
**20-mg tablets**

Mead Johnson PHARMACEUTICAL DIVISION

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When painful spasm
is the presenting
symptom...

...in the functional bowel/irritable bowel syndrome*

# Bentyl®

## (dicyclomine hydrochloride USP)

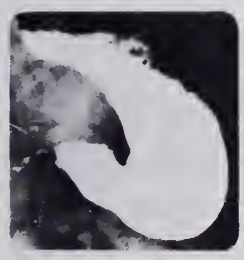
10 mg. capsules, 20 mg. tablets,
10 mg./5 ml. syrup, 10 mg./ml. injection

helps control abnormal motor activity
with minimal anticholinergic side effects†

Demonstrated smooth muscle relaxant activity.

In this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

. . . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.



Pylorospasm has almost totally blocked passage of barium meal.

Barium meal beginning to pass 10 minutes after intramuscular injection of 20 mg. Bentyl.

*"The correlation of spasm relief and drug given was excellent."*

*This drug has been classified "probably" effective in treating functional bowel/irritable bowel syndrome

†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:
King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964

Merrell

8 4420 (Y736A) MNR-804

# Bentyl®

## (dicyclomine hydrochloride USP)

Capsules, Tablets, Syrup, Injection

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATIONS

Based on a review of this drug by the National Academy of Sciences–National Research Council and/or other information, FDA has classified the following indications as "probably" effective:

For the treatment of functional bowel/irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

CONTRAINDICATIONS: Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient; unstable cardiovascular status in acute hemorrhage; severe ulcerative colitis; toxic megacolon complicating ulcerative colitis; myasthenia gravis. WARNINGS: In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. PRECAUTIONS: Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with: Autonomic neuropathy. Hepatic or renal disease. Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon. Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition

Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. ADVERSE REACTIONS: Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention, blurred vision and tachycardia; palpitations; mydriasis; cycloplegia; increased ocular tension; loss of taste; headache; nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation; bloated feeling, severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. DOSAGE AND ADMINISTRATION Dosage must be adjusted to individual patient's needs.

*Usual Dosage.* Bentyl 10 mg capsule and syrup: *Adults:* 1 or 2 capsules or teaspoonfuls syrup three or four times daily. *Children:* 1 capsule or teaspoonful syrup three or four times daily. *Infants:* ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg: *Adults:* 1 tablet three or four times daily. Bentyl Injection: *Adults:* 2 ml. (20 mg.) every four to six hours intramuscularly only. NOT FOR INTRAVENOUS USE. MANAGEMENT OF OVERDOSE: The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine* (bethanecol chloride USP) should be used.

Product Information as of October, 1978.

Injectable dosage forms manufactured by CONNAUGHT LABORATORIES, INC., Swiftwater, Pennsylvania 18370 or TAYLOR PHARMACAL COMPANY, Decatur, Illinois 62525 for MERRELL-NATIONAL LABORATORIES, Division of Richardson-Merrell Inc., Cincinnati, Ohio 45215, U.S.A.

**Merrell**

MERRELL NATIONAL LABORATORIES
Division of Richardson-Merrell Inc
Cincinnati, Ohio 45215, U.S.A.

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# LEGISLATIVE NEWS

The following is another in a series of summaries, prepared by the FMA Capital Office, of major laws enacted by the 1978 Florida Legislature affecting Florida physicians:

## CS/SB 992 — Certification of Radiologic Technologists

Prior to the passage of this legislation, several meetings were held with the sponsor of the legislation and with representatives of the Department of Health and Rehabilitative Services. Both the sponsor and the department stated on all occasions that the intent of the legislation was to establish a *two-tiered system for certification* of persons using x-ray equipment in Florida. One level would be for persons functioning as radiologic technologists *and the other for persons taking x-rays as a part of their overall job responsibilities (e.g. primary care physicians' office assistant).* For the later category, it is not the department's intention to go beyond basic safety when testing applicants for these certificates. The department also states that testing will be done on weekends so that as little disruption of daily medical activities as possible will occur.

Every effort is being made to insure the rules adopted are consistent with the stated intent. Comments concerning particular specific situations will be helpful in this undertaking.

*Administrator of Program:* Department of Health and Rehabilitative Services, Radiological and Occupational Health Section.

*Persons Exempt from Act:* (Section 3.)

1. Licensed practitioners: physicians, dentists, podiatrists, chiropractors, osteopaths, naturopaths and chiropodists.
2. Hospital residents
3. Students (working under direct supervision) enrolled in schools of: medicine, osteopathy, chiropody, podiatry, dentistry, dental hygiene, dental assistants, chiropractic and radiologic technology.
4. Radiologic Technologist employed by the U.S. Government.
5. Dental Hygienists and Dental Assistants licensed prior to act.

*Persons who may use X-Rays on Human Beings:* (Section 3.)

1. Licensed practitioners as set forth above.
2. Persons certified by HRS operating under a licensed practitioner.

*Fees:* $25 for first exam, $20 for each additional. Renewal fees will be determined by HRS.

*Requirements to take an Examination:* (Section 5.)

1. $25 fee.
2. 18 years of age.
3. Good moral character.
4. One of the following must be met by applicant:
   a. Complete 24 month approved radiologic technology courses.
   b. Complete HRS X-Ray safety study course (materials to be supplied by HRS).

(Section 9.)

   c. Has engaged in the field of diagnostic radiologic technology for at least 5 of the last 6 years.
   d. Has engaged in the field of diagnostic radiologic technology for at least 2 of the last 3 years.
   e. Persons meeting the requirements of "d" above but who are on active duty with the Armed Forces of the U.S. for any portion of a 6 month period.

*Ways to receive Certification without taking Florida's Examination:*

1. Nurses (ch. 464), physicians' assistants (ch. 458), and laboratory personnel (ch. 483) who can show (i.e. transcript, etc.) that their training encompassed coursework in radiographic techniques (x-ray safety). (Section 9.)
2. Receipt of certification, by a national organization or a state board, issued on the basis of a registry examination satisfactory to the department. (Section 7.)

*Limited Certificates:* (Section 9.) Limited certificates may be issued to the following:

1. Certified dental assistants or dental hygienists who have completed approved courses of study or passed an approved exam.
2. Persons who have recieved special training, satisfactory to HRS, to operate computer assisted tomographic scanners.

*Temporary Certificates:* (Section 8.) Temporary certificates may be issued to the following:

1. Persons qualified by prior experience who have

applied for the examination.

2. Persons qualified by prior experience who failed their first examination and who have applied for a second examination.
3. (Upon a physician's application) persons hired by physicians who have not taken their examination (expires 6 months from date of issuance).
4. During the first two years of the law, applicants who do not qualify by reason of a restricted area or duration of training and experience, but who can demonstrate satisfactory performance of the limited field, specified in their application. Such persons must have completed HRS' examination or be enrolled in an accredited AMA school program.
5. Persons whose certification or recertification may be pending.

**TEMPORARY CERTIFICATES SHALL BE ISSUED FOR NO LONGER THAN TWO YEARS.**

*Renewal of Certification:* Certification shall be renewed every two years. Continuing education may be required for recertification. Such continuing education which may be required of those persons certified in basic safety will be available through HRS in the form of home study. (Section 10.)

*Suspension or Revocation of Certificate:* A certificate may be suspended or revoked by HRS if, after a hearing, it is found that a person is guilty of certain acts set forth in Section 11.

*Penalties for Violation of the Act:* It will be a second degree misdemeanor for unlawful activities set forth in Section 12. Second degree misdemeanor penalties are as follows:

1. A fine not to exceed $500, or
2. Imprisonment not to exceed 60 days.

## SB 552 (Ch. 78-331)

This law gives the Department of Health and Rehabilitative Services the following new tasks relating to health care:

1. Conduct demonstration projects in risk factor control.
2. Contract for demonstration projects with county health departments to offer prepaid preventative health services to Medicaid clients.
3. Establish programs to assist in the placement of medical manpower in underserved areas.

*Risk Factor Control Projects*

The Department will conduct a demonstration project and evaluation study of chronic disease control programs, community health education programs, and comprehensive health improvement programs, to determine the desirability of establishing such programs throughout the State. Entities contracting with the Department to operate demonstration programs must contribute 25% of the cost. Existing community resources and volunteers, when available, will be utilized. The Department will develop rules for the operation of the programs to include intake and enrollment of clients and will submit to the Legislature reports evaluating the progress of the project.

*County Health Departments and Medicaid*

Under the Medicaid program the Department is authorized to contract with county health departments to conduct pilot projects whereby preventive health services would be offered to Medicaid clients on a prepaid basis without meeting the requirements of the HMO law. Reports to the Legislature are required and one of the projects is to be carried out by the Palm Beach County Health Department.

*Medically Underserved Areas*

The Department of HRS will function as a medical manpower clearinghouse to assist in the placement of medical providers in underserved areas. The Department will also contract with an outside entity to develop and operate recruitment programs for underserved areas. A grant program is created for communities and other entities to assist health care providers who relocate and establish a practice in an underserved area.

July 1, 1978 was the effective date.

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**The final goal of any leader is not restraint . . . but fulfillment.**

*Board of Governors*

OF THE

FLORIDA MEDICAL ASSOCIATION

P. O. BOX 2411 - JACKSONVILLE, FLORIDA 32203

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DONALD C. JONES, Executive Directo

# Summary of the Board of Governors Meeting April 6 - 8, 1979

The following is a summary of the actions taken by the Board of Governors at its meeting on April 6-8, 1979.

**THE BOARD:**

**Committee on Membership and Discipline**

Nominated physicians to the House of Delegates for election to the Committee on Membership and Discipline for terms expiring in 1979.

**Organization for Medical Electronic Data Processing Service**

Recommended to the House of Delegates approval in principle of the development through an appropriate FMA sponsored organization of an electronic data processing service of high quality at a reasonable cost to members of the FMA, subject to an appropriate feasibility study.

**FMA Policies and Retention of Corporate Records**

Approved in principle that FMA policies (other than Charter and Bylaws; fiscal and judicial) which have been in existence for a period of five (5) years or more, be rescinded by the House of Delegates unless reenacted and directed that proposed recommendations for implementation be prepared for presentation to the House of Delegates in 1980. The Board also approved a proposed schedule for retention of corporate records of the Association.

**Special Committee on Negotiations**

Requested the Florida Physicians Association to form a Committee on Negotiations for the purpose of helping individuals and/or groups in negotiating with third parties including government agencies, hospital boards and insurance agencies.

**MMJUA-PCF**

Authorized an actuarial review of the MMJUA-PCF to determine their actuarial soundness for the protection of Florida physicians and requested the State Insurance Commissioner, PIMCO and the Florida Physicians Insurance Reciprocal to participate in the study.

**Physician-Hospital Contracts**

Approved a position statement regarding physician-hospital and other health care entity contracts.

**Blood Banking**

Reaffirmed the current position of the FMA relative to Blood Banking in that the FMA is opposed to legislation which would eliminate the nonreplacement fee as a technique to encourage the voluntary donation of blood.

**FMA Councils and Committees**

**Council on Scientific Activities**

**CME Appeal and Suspension Procedures**

Adopted the proposed procedures for appeal and suspension under the FMA mandatory CME program for members.

**Distribution of CME Material**

Reiterated FMA's Continuing Medical Education policy that any promotional literature of a scientific or educational nature proposed for distribution during FMA annual meetings be made available only through an accepted scientific, educational or technical exhibit that conforms to the requirements and standards for exhibits; or through a scientific program.

**Council on Medical Services**

**Prisons and Jails**

Authorized, subject to appropriate budgetary controls, appointment of a task force consisting of physicians in Florida who have expertise in the field of prison and jail medical care for the purpose of working with the Committee on Public Health in submitting comprehensive recommendations regarding this subject.

**Home Births**

Requested the cooperation of private practicing physicians in reporting to County Health Departments any births that were not attended by a professional.

**Rubella and Measles Control**

Endorsed the Rubella and Measles Control Program and directed that this program be publicized through all appropriate FMA communications.

**School of Public Health**

Endorsed the establishment of a School of Public Health at the University of Miami.

**State EMS Program**

Authorized FMA representatives to contact the Secretary of HRS for the purpose of discussing the feasibility of contracting with the Florida Medical Foundation for the Administration of the State EMS Program.

**State CPR Program**

Authorized, subject to appropriate budgetary controls, appointment of a Cardiopulmonary Resuscitation Task Force for the purpose of developing a state plan to train the public in basic life support techniques (CPR).

**Athletic Policies in Local Schools**

Requested county medical society support for implementing FMA approved athletic policies in local schools.

**Physician Recruitment Conference**

Approved FMA sponsorship of a 4th Physician Recruitment Conference in October, 1979, and invited the Florida Academy of Family Physicians and the HRS Health Program Office to co-sponsor the conference.

**Therapies for Pain and Discomfort**

Expressed support of legitimate double-blind studies involving therapeutic uses of such drugs as heroin and marijuana for the reduction of pain and discomfort experienced by the terminally ill.

**Day Care Center**

Adopted a policy that day care center clients should be properly immunized or involved in an active immunization program.

**Tuberculosis Screening**

Notified the Department of Education and the HRS Health Program Office of the FMA's position on tuberculosis screening of day care center personnel and school students:

> Personnel of day care centers should be screened for tuberculosis in the same manner as that which FMA has recommended for school personnel.
>
> Students entering school for the first time and upon admission to the seventh grade, should be screened through the use of tuberculin skin test.

### Council on Medical Systems

**HSA Providing Medical Care**

Approved the position that all grant applications for the provision of medical care be considered on the merits of the application and no County Health Department be excluded from full consideration of its application.

**Survey on Health Claim Forms**

Authorized a postal card survey be mailed with the FMA *Briefs* to obtain information on the current methods used in physician's offices for handling health insurance claims.

### Council on Medical Economics

**Exorbitant Fees**

Resolved that the FMA urge all its members to exercise restraint and attempt to establish fees for new procedures that are appropriate and cost conscious.

### Council on Legislation and Regulations

**1979 Legislative Session**

Approved key legislative issues affecting health to be addressed during the 1979 Session of the Florida Legislature:

- Oppose changes in the Mediation Panel Law (SB 498)
- Oppose subsidy for state employees enrolled in HMO's
- Clarification of authority for physicians to delegate functions to trained assistant
- Legislation to allow attachments to Standard Claim Forms
- Oppose establishment of state health data systems
- Oppose relicensure of physicians
- Oppose increased authority for advanced nurse practitioners (SB 1)
- Oppose legislation that would bifurcate the SBME and emasculate that Board's authority

**Legislative Issues**

Other legislative issues affecting health addressed by the Board include:

- Oppose commission to regulate hospital rate increases
- Oppose mandatory hospital staff privileges for M.D.'s D.O.'s, Dentists and Podiatrists
- Support legislation to require payment for services (eg. lab) rendered on out-patient basis (HB 477, SB 569)
- Support legislation to require health cost impact statement for law and rules
- Support other concepts proposed in FMA position on cost of medical care
- Oppose certificate of need for physician's office equipment
- Oppose mandatory reimbursement to nurse practitioners under Medicaid (CS/SB 1, HB 601)

- Oppose treble damages for physicians "marking up" lab charges (SB 58)
- Oppose surgeons performance records (SB 60)
- Oppose funding for a school of optometry
- Support legislation prohibiting use of drugs by optometrists in Florida
- Endorsed legislation to reorganize the Patient's Compensation Fund Board of Governors so that a majority of members are from nominees of the FMA and FHA.

### Judicial Council

**St. Johns County Medical Society**

Recommended to the House of Delegates that St. Johns County be assigned to the Duval County Medical Society, pursuant to Chapter 11, Section 3, Sub-Section 8, of the Bylaws of the Florida Medical Association.

**Flagler County Medical Society Charter**

Recommended to the House of Delegates that Flagler County Medical Society be issued a charter from the Florida Medical Association.

### Committee on County Medical Societies

**AMA Membership Recruitment**

Authorized that special AMA stickers, available from the AMA, be affixed to appropriate badges during the 1979 FMA Annual Meeting to promote membership in the AMA.

**Liaison with County Society Executives**

Approved in principle the concept that county medical society executives should have adequate input into the activities of FMA but that it is primarily the responsibility of the Committee on County Medical Societies to insure improved communications and liaison with individual county medical societies.

**TO:** **Members of the Florida Legislature**

**FROM:** **James W. Walker, M.D., President, PIMCO**

**RE:** **Medical Mediation Panels and Medical Malpractice**

I have noted with alarm the numerous bills that have been introduced in the 1979 Legislature concerning medical mediation panels. Recently, Senate Bill 498 came to my attention. This bill along with the others having to do with medical mediation are an attempt by the Florida Academy of Trial Lawyers to destroy mediation panels in Florida.

Since the passage of the medical mediation legislation in 1975, this group of attorneys has done everything imaginable to try to circumvent the intent of the law. The constitutionality of the law has been upheld by the Supreme Court by a vote of 7 - 0. Recently, the Fifth Circuit Court of Appeal upheld the statute, notwithstanding numerous Federal constitutional attacks. This specific bill (SB 498) is but another attempt to dilute what the original law stated would be admissible in court as a result of medical mediation.

The medical mediation panels have proven to be an efficient, less-costly, impartial forum in which to hear a professional liability claim. Certainly, subsequent juries have been influenced, and rightfully so, by the fact that a judge, an attorney, and a physician have previously heard the claim and rendered an opinion. The successful results of the Florida Physicians' Insurance Reciprocal and the self-insurance trusts in Florida have been largely due to the mediation panels.

Mediation panels have rendered decisions on behalf of the defendants in approximately 91 percent of our cases. The National Association of Insurance Commissioners consistently reports that 80 percent of claims that reach trial result in jury verdicts in favor of the defendant doctors. It is apparent, then, that between 80 and 90 percent of all malpractice claims cannot be proven by plaintiffs; and merely because mediation panels are reaching the same results as juries in essentially the same percentages does not mean that mediation panels are prodefendant. If anything, it must mean that most malpractice claims are invalid since lay jurors and professionally constituted panels are in essential agreement that negligence is not demonstrated in 80-90 percent of all cases.

Mediation panels were intended to weed out some of the 80-90 percent of nonmeritorious claims and prompt a speedy, efficient settlement in the remaining cases. This legislative goal can only be accomplished by allowing the panel to reach a conclusion as to whether the physician is actionably negligent or not. This obviously cannot be reached if the panel is limited to a finding of probable cause as suggested in SB 498.

Significant also is that only 40 percent of the cases when heard in mediation are later filed in circuit court, and we are finding that many of those are filed as a bluff and that on the first day of the trial the plaintiff is moving for dismissal for he knows he has no legitimate claim. It is the multitude of these nonmeritorious claims that produced the professional liability insurance crisis in 1975. It is this lucrative practice that the plaintiffs' bar wants reinstated.

Several states have independently established pretrial mediation panels and though each differs in its format, each state has tried to solve this problem through the use of mediation. Even Congress has shown an interest in the mediation panels and is currently taking under advisement the creation of minimum standards for mediation panels with a mandate that each state have such a vehicle.

I would urge you to resist any change in the medical mediation statute or any of the other tort reforms passed by the Legislature during the years 1975 through 1978. There is simply no substantial evidence to indicate that the Legislature's judgment in responding to a statewide crisis in 1975 was improperly exercised. Indeed, the Legislature's response has brought stability to what has to be recognized as one of the most serious insurance crises in the state's history. A review of the preamble to Chapter 75-9 serves as a clear reminder to what the state was facing when the Legislature sought to resolve a most explosive situation. To undo what has previously been accomplished may invite upon us a return to the crisis which we faced and stabilized in 1975.

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## Procainamide Hydrochloride Tablets

**The only procainamide in veneer-coated, easy-to-swallow tablets**

**250 mg**

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- available in 3 tablet strengths for easier dosage adjustment—up or down— in all patients
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See following page for brief summary

## PRONESTYL® TABLETS
### Procainamide Hydrochloride Tablets

The prolonged administration of procainamide often leads to the development of a positive anti-nuclear antibody (ANA) test with or without symptoms of lupus erythematosus-like syndrome. If a positive ANA titer develops, the benefit/risk ratio related to continued procainamide therapy should be assessed. This may necessitate considerations of alternative anti-arrhythmic therapy.

**DESCRIPTION:** Pronestyl (Procainamide Hydrochloride) is the amide analogue of procaine hydrochloride and is available for oral administration as veneer-coated tablets providing 250 mg, 375 mg, and 500 mg procainamide hydrochloride.

**CONTRAINDICATIONS:** In patients with myasthenia gravis and where a hypersensitivity to procainamide exists; bear in mind cross sensitivity to procaine and related drugs. Should not be given to patients with complete atrioventricular heart block. Contraindicated in cases of second degree and third degree A-V block unless an electrical pacemaker is operative.

**PRECAUTIONS:** Evidence of untoward myocardial responses should be carefully watched for in all patients. In the presence of myocardial damage with atrial fibrillation or flutter, the ventricular rate may increase suddenly as the atrial rate is slowed; adequate digitalization reduces but does not abolish this danger. Ventricular tachysystole is particularly hazardous if myocardial damage exists.

The dislodgment of mural thrombi producing an embolic episode may occur in correcting atrial fibrillation due to the forceful contractions of the atrium.

Extreme caution is required in attempting to adjust the heart rate when ventricular tachycardia has occurred during an occlusive coronary episode or where the use of procainamide may result in additional depression of conduction and ventricular asystole or fibrillation as in second degree and third degree A-V block, bundle branch block, or severe digitalis intoxication.

Bear in mind when treating ventricular arrhythmias in patients with severe organic heart disease and ventricular tachycardia that complete heart block, which may be difficult to diagnose, may be present. Since asystole may result if the ventricular rate is significantly slowed without attainment of regular atrioventricular conduction, procainamide should be stopped and the patient re-evaluated.

In the presence of both liver and kidney damage, normal dosage may produce symptoms of overdosage—principally ventricular tachycardia and severe hypotension.

A syndrome resembling lupus erythematosus has been reported with oral maintenance procainamide therapy. Common symptoms are polyarthralgia, arthritis and pleuritic pain. Fever, myalgia, skin lesions, pleural effusion and pericarditis may also occur. Rare cases of thrombocytopenia or Coombs-positive hemolytic anemia, possibly related to this syndrome, have been reported. Measure anti-nuclear antibody titers at regular intervals in patients on procainamide for extended periods of time or in whom symptoms suggestive of lupus-like reaction appear; in event of rising titer (anti-nuclear antibody) or clinical symptoms of LE, assess the benefit/risk ratio related to continued procainamide therapy (see boxed Warning). Steroid therapy may be effective if discontinuation of procainamide does not cause remission of symptoms. If the syndrome develops in a patient with recurrent life-threatening arrhythmias not otherwise controllable, steroid-suppressive therapy may be used concomitantly with procainamide.

**ADVERSE REACTIONS:** Hypotension is rare with oral administration. Serious disturbances of cardiac rhythm such as ventricular asystole or fibrillation are more common with I.V. administration.

Large oral doses may sometimes produce anorexia, nausea, urticaria, and/or pruritus.

A syndrome resembling lupus erythematosus has been reported in patients on oral maintenance therapy (see Precautions). Reactions consisting of fever and chills have been reported, including a case with nausea, vomiting, abdominal pain, acute hepatomegaly, and a rise in serum glutamic oxaloacetic transaminase following single doses of the drug. Agranulocytosis has been occasionally reported following repeated use of the drug, and deaths have occurred. Therefore, routine blood counts are advisable during maintenance procainamide therapy; and the patient should be instructed to report any soreness of the mouth, throat or gums, unexplained fever or any symptoms of upper respiratory tract infection. If any of these symptoms should occur and leukocyte counts indicate cellular depression, procainamide therapy should be discontinued and appropriate treatment should be instituted immediately. Bitter taste, diarrhea, weakness, mental depression, giddiness, psychosis with hallucinations, and hypersensitivity reactions such as angioneurotic edema and maculopapular rash have been reported.

For full prescribing information, consult package insert.

**HOW SUPPLIED:** Pronestyl Tablets (Procainamide Hydrochloride Tablets) providing 250 mg, 375 mg, and 500 mg procainamide hydrochloride are available in bottles of 100 and Unimatic® single-dose packaging in cartons of 100. The 250 mg and 500 mg tablets are also available in bottles of 1000.

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**V-Cillin K®**
**penicillin V potassium**

**Description:** V-Cillin K is the potassium salt of penicillin V. This chemically improved form combines acid stability with immediate solubility and rapid absorption.

**Indications:** For the treatment of mild to moderately severe pneumococcal respiratory tract infections and mild staphylococcal skin and soft-tissue infections that are sensitive to penicillin G. See the package literature for other indications.

**Contraindication:** Previous hypersensitivity to penicillin.

**Warnings:** Serious, occasionally fatal, anaphylactoid reactions have been reported. Some patients with penicillin hypersensitivity have had severe reactions to a cephalosporin; inquire about penicillin, cephalosporin, or other allergies before treatment. If an allergic reaction occurs, discontinue the drug and treat with the usual agents (e.g., epinephrine or other pressor amines, antihistamines, or corticosteroids).

**Precautions:** Use with caution in individuals with histories of significant allergies and/or asthma. Do not rely on oral administration in patients with severe illness, nausea, vomiting, gastric dilatation, cardiospasm, or intestinal hypermotility. Occasional patients will not absorb therapeutic amounts given orally. In streptococcal infections, treat until the organism is eliminated (minimum of ten days). With prolonged use, nonsusceptible organisms, including fungi, may overgrow; treat superinfection appropriately.

**Adverse Reactions:** Hypersensitivity, including fatal anaphylaxis. Nausea, vomiting, epigastric distress, diarrhea, and black, hairy tongue. Skin eruptions, urticaria, reactions resembling serum sickness (including chills, edema, arthralgia, prostration), laryngeal edema, fever, and eosinophilia. Infrequent hemolytic anemia, leukopenia, thrombocytopenia, neuropathy, and nephropathy, usually with high doses of parenteral penicillin. (102175)

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# The FMA Hospital Money Plan

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Unexpected expenses, Loss of income. Uncovered costs. Inflation, These, and more, can quickly add up to a severe financial burden that could take years to overcome. Unless . . . you have the foresight to help prevent such an occurrence tomorrow by enrolling in the Hospital Money Plan today.

This supplemental insurance plan — sponsored by your Florida Medical Association — has been developed to help meet the pressing financial demands you'll face when hospitalized.

In essence, the Hospital Money Plan simply provides a valuable daily benefit . . .

- up to $100 per day
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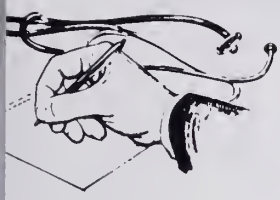
- up to age 65 (after age 65, for one full year)
- in addition to all other insurance you may have

. . . for each and every day you are hospitalized by a covered accident or sickness.

Best of all, you and your eligible family members are *guaranteed acceptance* — regardless of your health histories! There are no questions asked, no physical exams required.

It makes sense to help provide protection for your future . . . and your family's future. For further information concerning the Plan, contact the Professional Insurance Management Company (PIMCO).



# Others Are Saying

## One MD Brings Life to a Lost Word

**Norton Cooksey, M.D.**

I sing of a lost word.

Not lost, perhaps, only misplaced or forgotten; a set-aside, out-of-fashion word, a misinterpreted, undervalued word, disfigured by over-use at inappropriate times and in unseemly places. Diminished by synonyms old and new that are innocent of its true depth of meaning, it starves for lack of use.

I sing of love.

It has no equal in the English language, but many substitutes and pale, distorted, and impotent successors.

We speak of caring, and develop useful, but harmless and tepid thesis on that noble impulse.

We speak of ethics, and erect whole schools and word-structures of philosophy on the word, with branching and budding subdivisions that enlighten—and confuse.

We speak of manners, and of morals and character, little understanding or aware of their origins; and we divert ourselves by shallow words and stiff actions from what, in our hearts, we really intend to say and do.

We are afraid of love — afraid to love and be loved — and partly because of this fear, too seldom use the strongest healing tool man can possess. Or if we use it (for I'm satisfied that a great many of us do) we use it halfheartedly, nearly ashamed, fearful we'll be misunderstood.

Genuine love absorbs anger, that most potentially destructive of emotions, and lets it play itself out.

Love surpasses understanding and interpretation; makes all things possible; creates hope where there seemed to be none; cures in ways that defy reason.

Love will not be circumscribed nor cheapened. In the end, its life-giving, life-sustaining reality cannot be denied.

But it can seem to be lost — as our times seem to have lost it — as other times have.

Consider it well, dear friends and associates. When did you last embrace a bereaved wife or husband, a frightened or overwhelmed person in the corridor of your hospital, or in your office? When did you last sit, perhaps tearfully, by suffering or lonely patients, and share, in silence, the love that needs no words, no explanation nor excuse?

Consider it. Seek it out in unexpected places, and most especially in apparently unlovable people. Exercise your birthright of privileged humanity.

As physicians, much has been given us, and much is expected. Our potential reservoir of love is inexhaustible. But we tire, too — become exasperated, harassed, and angry — and sometimes ill ourselves. Our very human-ness wills it to be so.

But there is no secret to the capacity for the realization of this loving; no equation by which it can be derived.

It is simply there to be experienced, practiced and shared. Love's time is — has always been — now; its place here.

A forgotten word? I know otherwise.

---

Dr. Cooksey is head (and comprises all) of the Department of Internal Medicine at Leelanau Memorial Hospital, Northport, Michigan.

This sketch by Dr. John W. Snow, a leading Plastic and Hand Surgeon of Jacksonville, denotes the many and varied activities of the Florida Medical Association Auxiliary. Dr. Snow has been a frequent contributor of many fine covers to the Journal.

THE JOURNAL
OF THE FLORIDA MEDICAL ASSOCIATION
MAY 1979
VOL 66 • NO 5

# Special Issue
# Florida Medical Association Auxiliary
## Introduction

**Pat Thames (Mrs. Thomas Byron)**

This year's theme of the Florida Medical Association Auxiliary, "Year of Awareness," charged each auxilian to be aware of his or her family needs, auxiliary needs, and community needs. Efforts to pinpoint these needs were accomplished through questionnaires, surveys, county auxiliary meetings and leadership seminars.

This month's cover drawing by Pat Flynn of Orlando illustrates the goals that the Auxiliary set. They were: 1) service to our communities through child abuse prevention, CPR instruction, BSE instruction, youth safety, poison safety, immunization, health testing/screening programs, blood donor programs, organ donor programs, worry clinics, programs to assist the aging, no-smoking programs, to name a few; 2) to raise money for AMA-ERF and International Health through the Christmas Sharing Care, Fall Conference Bazaar, special luncheons and dinners, sale of puppets and various other fund raising functions; 3) to work with enthusiasm and perseverance to increase state and national Auxiliary membership; 4) to promote mutual understanding, cultivate friendly relations, increase fellowship and stimulate a feeling of cooperation among the medical families; 5) to promote health careers through health career days, health career fairs or health career clubs; and 6) to inform our membership on important medical related legislation. Challenges offered by these goals will result in continued activities over the next several years.

Are you aware of the Florida Medical Association Auxiliary, its goals and activities, and have you and your spouse contributed to their accomplishments in 1978-79?

**The Author**

*MRS. THOMAS BYRON THAMES*

*Mrs. Thames (Pat) is President of the Florida Medical Auxiliary and resides at Orlando, Florida. Her husband is a member of the Board of Governors of the Florida Medical Association.*

Mrs. Thames

*The following articles were solicited and submitted especially for this special issue of The Journal which pays tribute to the Florida Medical Association Auxiliary.*

# How I Communicate With A Bookworm

## (My Secret for an Enduring Happy Marriage)

**Elizabeth D. Vickers (Mrs. F. Norman)**

The well known psychologist, Sidney M. Jourard, once wrote "Kierkegaard refused to marry and thereby defied the nineteenth century. I have refused to divorce and I defy the twentieth."[1]

This little pearl of wisdom is to be savored; however, it does elicit a perplexing question. How does one succeed in being a "defiant one" in this era of marital malfunctioning?

The answer to such a question is bound to be complex and as elusive as the cure for the common cold. Then, again, it might be within easy grasp if each of us is but willing to search for it.

My own personal quest for a satisfactory answer was not rewarded with instant success. It was a gradual process that was finalized while I was waist deep in my annual ritual of cleaning out bookshelves; it dawned on me that I was married to a BOOKWORM!

**The Author**

*ELIZABETH D. VICKERS*
*Elizabeth (Betty) Vickers is a former nurse-educator and the mother of three teenagers. She has an interest in Pensacola medical history. Her husband, Norman, is a gastroenterologist with interest in his wife, medical journalism and music.*

The yearly "bookcleaning" may take several days since there are bookshelves in every room in the house. I end up with several stacks of books on the floor, each bearing a destination label—FRIENDS OF THE LIBRARY BOOKSALE, HOSPITAL LIBRARY, ATTIC, NEIGHBORS, INCINERATOR, ETC. Ultimately, space is found for the three or four cartons of new books that have migrated to our house.

My husband's reading habit was a firmly entrenched one when we married at the end of his internship. There was always an inexhaustible supply of journals to read. The situation remained unchanged during residency days.

It is now twenty-one years later; he's established in private practice and his reading activity continues to escalate. His commitment increased with his work on the County Medical Society Bulletin and the Book Review Section of the Journal of the Florida Medical Association.

However, there are disguised blessings attached to his reading compulsion. It has opened up new ways of communication for us and enabled me to recognize and develop some of my own talents.

I discovered that when Norman reads he doesn't listen to what I say. He pretends to hear me and utters inane responses at intervals to feign attentiveness. He

has coined a set of verbal answers that are pre-programmed for use when anyone tries to converse while he is buried in a book. It's impossible to interrupt his concentration.

I became aware of this one night as I announced that our nearest and dearest friends, Jake and Bubbles, were getting a divorce. A muffled but cheerful, "Terrific" came from behind the book. I was shocked at his response since the three of them have a harmonica trio and play regularly every Sunday afternoon. I was suspicious that he wasn't listening and decided to do a little experimenting.

"BW," I said, "why don't we get a divorce? Everybody is getting one."

To this he replied, "Save your money."

Encouraged to go on, I added, "The printer says he knows where I can get one real cheap."

"They are cheaper at K-Mart," he grunted.

Convinced that my observations about his non-listening were correct, I threw out a final tester.

"BW, I decided to learn about the stock market a few months ago and signed up for a course on money at the Junior College. I invested $1000 in an Iranian Racquet Club and may have lost it all. Are you angry?"

His pre-programmed response was a jolly, "Terrific."

This newly acquired data taught me one thing; we needed to revise our mode of communication!

I took a course in typing, creative writing, how to start a filing system, how to be assertive, how to fight via the memo and a few related seminars. Our relationship has scaled new heights in communication—it's almost all in writing.

When asked recently how we accounted for our twenty plus years of happy marriage, Norman responded, "We read and write a lot!"

It may appear that I jest about a very serious subject—marriage. On the contrary, this is my unique way of sharing some of my thoughts about what contributes to joy, happiness and stability in a marriage, especially a medical marriage.

Having a sense of humor is a must. Keeping conflict alive between husband and wife requires a great expenditure of energy. Redirecting this same energy can lead to the discovery and development of hidden talents for each partner. The payoff can be an enriched marriage. Finally both partners must be deeply committed to marriage and the exploration of new ways of keeping it viable.

● Mrs. Vickers, 3720 McClellan Rd., Pensacola 32503.

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**There is no deeper happiness**
**Than that which comes from sharing**
**No greater joy than that which comes**
**From loving, giving and caring.**

**George W. Douglas**

# Women Physicians' Changing Role

Doris N. Carson, M.D.

**Abstract: A comparison of women's historical acceptance in the practice of medicine — 19th and 20th Century.**

**A current view of Florida's practicing women. Statistics in relationship to women in medical schools and practicing physicians in the nation and the state.**

A great deal has been written about the role of women in the work world varying from the moralistic approach to the militantly female. This report is in the school of the empiricist who is not directly involved in the value implications of the changes that are obviously underway. It is, however, difficult to note these changes without seeing some of the implications both for medicine and for the change in women's role in our society.

Women's careers in medicine and other highly educated professions is not nearly as simply studied as is the male's pattern. One of the striking differences is the complexity of the options faced. Another fascinating study would be the relation of family and marriage to the obtaining of a complicated goal such as the M.D. degree. The isolation of women from the work world was a significant state of affairs for only about 80 years from the Civil War to World War II. Even during this time women from the lower income levels continued to work. Medicine was involved during this period in the societal controversy of women's proper role.

## Female Enrollment Increases

There has been a dramatic increase in the number of women admitted to medical schools in the last five years. This sharp increase may signify a changing cultural acceptance for women. This is not the first time women have increased their numbers in the medical professional ranks. Interestingly, the end of the 19th century saw a similar increase. This increase was also associated with a cultural kind of revolution. Women achieved suffrage in that upheaval. The 19th century feminist movement and the 20th century counterpart may be related to the similar rising patterns.

The history of women in medicine goes back 140 years. It involved in the 19th century many feminist groups. The hot bed of this thrust was in the New England area. Even hospitals were developed with feminist supported funds so that in-hospital training might be offered women. The medical establishment in excluding women acted as an impetus for the establishment of women's medical schools. The battle for admission into the elite medical schools (Harvard and Johns Hopkins) was associated with skirmishes aimed at admission of women to medical societies as well.

In 1893, three out of 21 new medical students at Johns Hopkins were women. This did result in some withdrawals from the Baltimore faculty. There were 17 women's medical schools operating at that time. Those involved in these felt the time was rapidly approaching for their closure. Women across the country made up more than 10% enrollment in established co-educational schools.

In Boston in 1900, 18% of the practicing physicians were women. Perhaps Victorian prudery added to the demand for female practitioners. It is not clear what happened to the role of women physicians but as the "all women schools" were closed the expected acceptance of students in co-educational environments did not occur. The number of women steadily declined as a sort of undeclared quota overtook the acceptance of students from the turn of the century. This turn seems related to society's attitude toward women in general.

As schools closed that were female oriented, the percentage of practicing female physicians became less.

## Influencing Factors

Numbers of things influence the number of women entering or continuing in careers such as medicine. One very important factor is the kind of influence we as families have on our children, the personality and strength of women. The uncontrolled forces in our society can be seen to affect the numbers involved. Wars

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**Table 1. — The Coeducational Retrenchment: 1894-1908[1]**

| College | 1894 Total Enrollment | 1894 % Women | 1908 Total Enrollment | 1908 % Women |
|---|---|---|---|---|
| Univ. of South California | 39 | 15.38 | 89 | 10.11 |
| Denver Medical College | 36 | 25.00 | 79 | 5.06 |
| George Washington Univ. | 88 | 12.50 | 198 | 1.51 |
| College of Physicians & Surgeons | 135 | 21.48 | 162 | 0.00 |
| Tufts University | 80 | 28.75 | 371 | 9.43 |
| Johns Hopkins University | 83 | 15.66 | 281 | 6.76 |

**Table 2. — Women in Medical Schools — National Enrollment Averages[2]**

| | |
|---|---|
| 1929 | 4.5% |
| 1955 | 5.5% |
| 1971 | 10.0% |
| 1973 | 12.8% |
| 1975 | 20.0% |
| 1977 | 24.0% |

**Table 3. — Historical Patterns of Women Physicians[3,4]**

| | Women Physicians | Total Physicians | % Women |
|---|---|---|---|
| 1900 | 7,387 | 132,002 | 5.6 |
| 1910 | 9,015 | 151,132 | 6.0 |
| 1920 | 7,219 | 144,977 | 5.0 |
| 1930 | 6,825 | 153,803 | 4.4 |
| 1940 | 7,708 | 165,989 | 4.6 |
| 1950 | 11,823 | 191,947 | 6.1 |
| 1960 | 15,672 | 260,484 | 6.0 |
| 1970 | 24,088 | 334,023 | 7.2 |
| 1973 | 30,568 | 366,379 | 8.3 |
| 1976 | 30,793 | 357,762 | 8.6 |
| 1977 | 45,136 | 403,000 | 11.2 |

reduce the number of males available and tend to increase the acceptance of this complicated goal for women. Depression seems to always affect the numbers negatively. Evidently, when money is in short supply society and families tend to spend available funds on the male members.

Mandelbaum, analyzing motivation for career persistence, lists early motivation as the single most important influence. Family encouragement, teachers and others exposing the early school child to scientific and social material motivates the youngster toward medicine.

The number of women enrolled in medical schools in the United States has steadily risen. In the last recorded academic year 13,059 were enrolled. The percentage of women applicants accepted as against the percentage of men accepted is about the same.

Our own Florida Medical Schools reflect a parallel increase.

**Table 4.— University of Florida, College of Medicine[5]**

| Year | Total Applicants | Female Applicants | Class Size | Females In Class | Percent Females |
|---|---|---|---|---|---|
| 1972 | 2447 | 256 | 70 | 9 | 12.8 |
| 1973 | 1799 | 278 | 80 | 11 | 14.0 |
| 1974 | 2047 | 365 | 80 | 20 | 25.0 |
| 1975 | 2211 | 449 | 85 | 16 | 19.0 |
| 1976 | 2482 | 492 | 85 | 17 | 20.0 |
| 1977 | 2431 | 570 | 85 | 21 | 25.0 |
| 1978 | 1966 | 489 | 85 | 19 | 22.0 |

**Table 5. — University of Miami, School of Medicine[6]**

| Year | Total Applicants | Female Applicants | Class Size | Females In Class | Percent Females |
|---|---|---|---|---|---|
| 1972 | 1237 | 104 | 131 | 16 | 12.0 |
| 1973 | 1521 | 166 | 131 | 17 | 13.0 |
| 1974 | 1260 | 182 | 130 | 16 | 12.0 |
| 1975 | 1163 | 211 | 129 | 20 | 16.0 |
| 1976 | 1250 | 217 | 133 | 25 | 19.0 |
| 1977 | 1230 | 188 | 139 | 25 | 18.0 |
| 1978 | 1231 | 246 | 138 | 33 | 24.0 |

University of Miami/Jackson Memorial Hospital Residency Programs 1978-1979: Men — 603; Women — 80 (13%)

## Social Acceptance

The number of young women applying no doubt reflects the increasing number of women whose ambitions are expanded by a better climate of social acceptance. For the first time in history, encouragement is offered to the college level student that medicine is a proper ambition for women. Of National Merit Scholars at high school level in the 1960's, some 30% had goals toward upper level scientific positions. After college only 6% maintained this aim. This is a puzzling reflection of the academic stimulation of our University systems.

A profile of the typical woman physician emerged from a comprehensive study conducted in 1960. At that time, it showed 57% of female doctors were married and that these women typically had 1.8 children as against the current average at that time of 2.3 in other medical families. Other findings were that half of the married women physicians were part of a husband-wife-doctor team.[7]

In the AMA master file in 1971, 27,000 women physicians were registered. Eighty-three percent were professionally active. When physicians are distributed according to their primary medical specialty (based on the largest number of hours of their professional time so spent in a typical week), the one with the most appeal for women is pediatrics, including pediatric allergy and pediatric cardiology (4,247). Next comes psychiatry, including child psychiatry (3,209), internal medicine (2,772), general practice (2,462), anesthesiology (1,655), pathology (1,441), and obstetrics-gynecology (1,421).[8] These seven specialties combined account for more than three-fourths of the total number of active women physicians. No more than 100 women specialize in such fields as gastroenterology, orthopedic surgery, otolaryngology, plastic surgery, and occupational medicine.

Only in the past five years has an increase been noted in the total percentage of women in practice. In Florida, the current number is extrapolated from a Health and Manpower questionnaire submitted with renewal licensure. Of 16,105 practicing physicians with a Florida address, 924 are women.

## Most Common Specialties in Florida

In Florida, the five most common specialty areas recorded in 1977 for women are listed in order of frequency: 1. Pediatrics 2. General practice 3. Internal medicine 4. Anesthesiology 5. Psychiatry.

The national figures published by the AMA indicate women make up a national level of 10%. Florida has only about half that number.[9] International figures indicate a preponderance of women in Russia (56%) and in China (52%). The figures for England reflect 11% of physicians outside of hospitals as women and about 8% in hospital staff stations. One-third of medical students in Great Britian are now female.

Women doctors follow the same career patterns as men until they have commitments to children or elderly relatives. Thereafter, if short breaks for maternity leave are made available, the typical woman will progress with higher qualifications and build up her medical experience and remain functional. The women's involvement early in her career with family has in most cases kept her out of the committee systems which develops medical leadership. The presence of women at the decision-making level of all the large medical societies is still very weak.

We may be looking at the vanguard of the future with the current increase in female medical school enrollment. Society has always insisted that a man will work. Moreover, the expectation has been that he will work all his life. As more girls grow up with role models who work, this can be expected to become an easier role to assume. Society now has presented a broader scope for self-determination on many levels, not least of which is the ability to plan families with a great deal of reliability.

The models upon which young people pattern their lives depends upon their educational preparation, their perceived occupational possibilities and the distribution of their energy between work and other facets of their lives. All of these decisions and actions reflect the values and dreams of families and society as a whole. The time is surely with us when society must accept that women have half the nation's most valuable resource — human talent. They must be encouraged to develop and utilize it.

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**One of life's little ironies is the fact that when you finally master a tough job you make it look easy.**

# Togetherness

John Patrick Hanley, M.D. and Kay Knight Hanley, M.D.

***Two pediatricians, married, practicing and working hard together . . . that sounds like a good deal. It is. Here is the beginning of that story and some personal events which we would like to share with you.***

Huge snow flakes slowly fell, covering the road and the black lava slopes of Mt. Fujiyama, as I made a sharp turn and skid in the Jeep to go up a winding road toward Lake Yamanaka and my meeting with Sister Mary Margaret. This was my last trip to deliver much needed medical supplies for the Japanese orphanage and it was going to be hard to say good-bye to my good friend. High up on the slopes, I passed the road-side Shinto shrine almost buried now in the snow. The Jeep made a good jump in four-wheel drive over a snowbank to a small parking area. This was the meeting place and I waited. It had stopped snowing momentarily and I could see deep drifts of snow covering the trails usually taken by Sister Margaret. I wasn't worried. She had said she would be there.

Across the steep slope I saw a horse. Two nuns were leading him through the deep drifts of snow with their winter shawls and sail-wing habits flowing behind them. They reached what looked like an impassable area and suddenly Sister Margaret took out some snow shoes which the horse was carrying, put them on and slowly came across the fairway slope and approached the Jeep. This was an unforgettable scene because half way around the world, here were two nuns of the same order as those who were in charge of nursing at Charity Hospital in New Orleans.

As they reached the parking area out of breath, I had the medical bags ready. We talked a few minutes as they rested, I in English, they in French. I had to tell them I was leaving to go home, back to Charity Hospital in New Orleans, Louisiana. At first there was a long silence and tears came into her eyes, as we both looked out over the frozen lake. She turned and said, "You will be together again with your close friends and girlfriends. That is good. We need you here, but you are needed more at home. Yes?" She picked up her medical supplies and again thanked me many times. And in her usual mother superior way said, "Be together. Au Revoir, St. Patrick, Isha." Then she snow-shoed down the embankment to the waiting horse.

Little did I know how much I would be thinking about those words of Sister Margaret. After three years of extended overseas duty with the U.S. Navy and Marine Corps, in many parts of the world, it was nice to look home again.

In three days, I reached New Orleans to begin my residency anew. As I walked into the emergency room at Charity Hospital, a tall, attractive, black-haired resident was hurriedly searching the drug cabinet for a medication. She just happened to drop the brochure out of the box. I retrieved it and gave it to her as she kept on going. She reached an examining room, stopped and

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turned for a second. There was a shadow of a smile as our eyes met, then she disappeared to see her patient. I didn't know her and she didn't know me, but somehow I knew we were going to be together.

One morning at coffee with residents, my best friend introduced me to the tall willowy girl I saw in the emergency room. Her name was Kay Knight, and she is from St. Simons Island, Georgia. Two weeks later we had our first "formal" date. I had acquired two free tickets to see "Madam Butterfly." Unfortunately, they were on the last row in the second balcony and during the second act I fell asleep. Needless to say, my date wasn't too impressed. Soon after, however, we began to enjoy many fun places together in New Orleans. For two years, while completing our residencies, we learned the French Quarter by heart. Muffeleta sandwiches, stuffed artichokes, French coffee and doughnuts from Cafe de Morn, a late dessert at Brennan's and ice-cold Falstaff beer at the brewery, were regular weekend things to enjoy. The reason, of course, was because a good friend and I shared a small, slave-quarter-like apartment over Harry's Bar, in order to escape the stone walls of Charity Hospital for any weekend rendevous! This was a neat apartment, because you could walk to all the good places in the Vieux Carre in five minutes and Kay liked it, too.

In addition to the French Quarter, Lake Pontchartrain also became a favorite meeting place. Two of our friends lived on a houseboat and when they were away, I lived aboard and was chief babysitter for the houseboat and Herman, their pet duck. The New Orleans Marina was quite a place and I never had any trouble getting friends to come out to the houseboat and enjoy the scenery. Life was fun there and Kay became an expert sailor on a ten-foot Snark.

With three years of pediatric residency, some vacation was needed along the way. One of the real tests of "togetherness" between Kay and me came when I had a chance to go to Aspen, Colorado, for a skiing trip. The only problem was making sure the premature nursery had resident coverage for 96 babies. Since two senior residents and the nursing staff handled this smoothly, I wondered if one resident could handle it for ten days. And if so, — who? Somehow, after careful deliberation, a decision was made and Kay was assigned this task while I went to ski country for the first time. Fortunately, I did well learning to ski in Colorado, but, unfortunately, I ran out of money. I called Kay one night late and asked her if she would loan me $200.00 and wire me the needed funds so I could stay and ski another five days. She did, without any questions. I knew she trusted me, but $200.00 worth? The ski trip did turn out well, and the nursery did make it, though our professor never knew we were down to one senior resident on the nurseries.

With each of us finishing our residency program, we began to look home again; I to Florida and Kay to Georgia. Leaving a training program was not easy and a little uncertain. Where are you going to practice medicine? That last day finally came for Kay and I helped her pack up her car and off to Georgia she went. I thought I might not see her again. After three weeks of reminiscing our many good times together, I called her and said I was coming to see her at St. Simons Island.

With three years of military travel and three-and-a-half years of busy residency training behind me, the approach to St. Simons Island and the Marshes of Glynn was a beautiful sight. After a three-day visit there, this tall, willowy girl with a beautiful smile agreed to go home with me to Stuart, Florida. There we went surfing one day and when that perfect wave came along and we were "tubing it" toward the beach, I asked her to marry me. There was a pause. She said, "I'll think about it. — Yes!!!"

Ours was a simple wedding, too, in the smallest church we could find — Epworth by the Sea, on St. Simons Island. From there we went to Jamaica for a week and our honeymoon stay was kindly extended, when a hurricane struck the island. What a way to begin togetherness. Fortunately, the airline helped pay our hotel bill and Kay never asked me for that $200.00 I owed her.

We returned to Florida and settled in Clearwater, where we have been for 12 years now. Each year seems to bring us one or two more adventures. Reminiscing, however, we always seem to remember the above true story.

In conclusion, here are some thoughts on working together:

1. If the work pace is too fast, slow it down — change the tempo.
2. If the music is too loud, "pianissimo" and change the tune.
3. If the air-conditioning is too cold, warm up, sit close to each other.
4. If you like surprises, dress up or dress down and go somewhere you haven't been before.
5. If you like the beach, paint a picture of the ocean — collect colored shells — buy a painting of a sea gull in flight — or better yet, go to the beach together.
6. If you like sailing, go to a boat show — make your next pair of shoes, sailor's deck shoes — find a friend with sailboat and be the crew for a day.
7. If you want to do something well, you must do it enthusiastically.

These are our "generic prescriptions" for working, loving and enjoying things together. We want to share them with you. Perhaps you have some reflections of togetherness, too.

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# Vignettes in Medicine

Ruth and Franz Stewart

## I. — The Start

Hand in hand they ran from the church. out the door and down the steps. The music, the magic words, all the well-wishing friends were just for them — their special day — their real beginning!

She opened the car door and jumped in, gathered her skirts as he shut the door, ran around to the other side, sat behind the wheel and glanced at her. She flicked away a single tear. Her eyes were unmistakably sad, inquiring, almost pleading the future, but it passed in a second. He, too, had wondered at the uncertainties of such a change in life and responsibility that today brought.

He turned the ignition key and the motor responded!

Monday morning came so soon. They sat together at the quick order stand. Coffee and doughnuts — the hospital by seven for him and class by eight for her — Neo-classic Art was the first lecture, I think.

## II. — Medicine and Marriage

Medicine has been present in human life in one form or another for as long ago as we have been able to decipher archeologic remains. It still attracts followers who vary from age to age and society to society, but there are personality traits that recur time and time again.

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*RUTH STEWART*

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These are an intense interest in life and its interactions, with the environment in which it exists, and in its relation to the supernatural or religious mores surrounding it. This, I believe, is a fundamental, ageless, propelling force in medicine joined to an active inquiry into life processes and with an attempt to guide or alter physiologic adaptation to environment.

This fundamental personality trait or interest appears often enough in medicine to be dealt with as a characteristic the doctor will bring to his marriage. Certainly, such a generalization will be subject to variation because of the many, many reasons why some are attracted to the profession in a particular time or place. Anyway, we can profit by looking at this interest drive and try to see what sort of person it is who chooses to work in this way.

This person must remain very much an individual and a loner in his ultimate professional pursuit. Judgments must be made, supported by unanswered questions and the doctor must live with this uncertainty and adjust to the things his prowess can and cannot do. He must grapple with the multiple and variable factors influencing any treatment or diagnostic approach. These must be fitted in by his own feeling, discernment and cogitative processes. Interest in life must be interpreted in terms of the individual. The way he reacts to this will determine in many ways the kind of person he becomes and the personality props he will grasp.

Robert Frost once asked one of us, "How do you measure how you are getting on?" The doctor, knowingly or not, is forever trying to answer this question. The answer is an ongoing relative process and will never be answered by tangible goals achieved. The goal remains an interest in life and its interactions with environment, physical or social. Change and variable relationships remain the hallmark of truth in medicine.

In trying to calibrate his professional ability he may seek titles, rank in the hierarchy of schools, hospitals, medical societies, programs — not for the strong factor

of competitiveness in excellence with his fellows — but occasionally as status symbols.

This person you have married is perhaps more intensely individual in his professional pursuits than most and he may have problems in trying to measure up and often falling short of aims. If you are of similar intelligence, have complete integrity, are saved by some artistic sensibility and are both seeking the chimera of ever-changing measures in life, then your marriage can be a happy, living relationship!

If either grabs easy measures of success, loses the integrity to know when actions or thoughts are in error or falling short of the best, then each will lose the other.

**III. — Laws of the Jungle for the Doctor's Wife**

Discreet in all areas.

Share stimulating friends and activities preferably outside the profession.

Ability to create relaxed atmosphere and diversions.

Sense of humor.

Pride in husband's standards.

Confident acceptance of other doctors' care of friends.

Wise words of a wonderful doctor's wife when discussing patients " _____ "

● Dr. and Mrs. Stewart, 3661 South Miami Avenue, Miami 33133.

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***When things go wrong as they sometimes will.***
***When the road you're trudging seems all uphill;***
***When the funds are low and the debts are high***
***And you want to smile but you have to sigh,***
***When care is pressing you down a bit***
***Rest! If you must — but never quit.***

***Life is queer with its twists and turns***
***As every one of us sometimes learns.***
***And many a failure turns about***
***When he might have won if he stuck it out.***
***Stick to your task though the pace seems slow***
***You may succeed with one more blow.***

***Success is failure turned inside out;***
***The silver tint of the clouds of doubt.***
***And you never can tell how close you are***
***It may be near but it seems afar.***
***So stick to the fight when you are hardest hit,***
***Its when things seem worst that you MUSTN'T QUIT!!***

# A Medical Student Marriage

Jerrold and Gretchen Van Dyke

## I. Her Viewpoint

"I'll never marry a doctor," was a frequent phrase in my repertoire. That was, of course, until I met and fell in love with a man who wanted to become a doctor! I had heard so much about the life of a doctor's family and didn't want a part of it. My father, an insurance salesman, has his evenings and weekends free and has plenty of time to spend with his family. I wanted my family to be modeled after the one I grew up in.

Jerry and I met during his first week of undergraduate school and were married two years later. During our courtship and early marriage, Jerry was very busy studying so that his grades would be high enough to be accepted into medical school. We were ecstatic when that day finally came.

His first year of medical school almost seemed easier than the previous years because the pressure of "getting in" was off. Then came "rotations." That was a true test of our marriage.

Kristen, our first child, was born on the first day of his OB-GYN rotation, so Jerry did not have too much time for fathering right then — or for that matter, anything else at home.

I had been working full time and Jerry had been helping with the chores at home. Then, when these chores were increased by a new addition to our family, Jerry's time at home was sharply decreased. Therefore, so was my help. Adapting to this new lifestyle was stressful.

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I think the hardest thing for me in being a medical student wife was that the demands placed on my husband by the medical school curriculum left little time for him to be a "contributing" member in our family.

Being a medical student left no time to earn money at a part-time job, and very little time to help with household chores and child care.

The intense pace at school left him physically and emotionally exhausted at times and I felt helpless because there was nothing that he or I could do to change it.

During the past year of school, life has become much more enjoyable because Jerry has more free time and therefore is able to function better as a husband and father.

Overall, having been married prior to and during medical school will certainly be an advantage during the coming internship year. We have both learned to adapt our thinking and expectations to a more realistic view for a professional family lifestyle.

## II. His Viewpoint

No one said it would be easy being married while in medical school. In fact, many people went out of their way to let us know that it was going to be a very difficult time. Comments like, "It sure is lonely being the wife of a doctor," or "I'm sure you know that most doctors divorce their wives after they put them through medical school," cause added turmoil and frustration in a new marriage.

Medical school has had both its ups and its downs just like anything else. One of the problems has been the lack of encouragement and out right discouragement people are willing to give freely. Everyone seems to have a favorite "war story". "Don't worry," they say sarcastically, "It is bad being married during medical school, but it is going to get worse! Interns are never home and when they are home, they are sleeping."

Inconsiderate remarks such as these have added needless stress to our marriage. We will admit that having one spouse working and the other trying to gain a medical education does not create ideal circumstances for a marriage, but then again, things could be worse.

Gretchen is quick to ask why she should take advice on health care from someone who refuses to eat regularly, sleep regularly, and take time to relax and grow personally. Her point is well taken. Often medicine tends to overly dominate every aspect of one's life and shrink one's universe. Physicians are quick to neglect their own mental and physical health as well as that of their own family.

Basically, being married while a medical student does work as I'm sure many people will testify. It just takes some adjustment to a rather unique lifestyle and at least one smart partner who keeps her feet on the ground.

● Mr. and Mrs. Jerrold A. Van Dyke, Box J-1007, Gainesville 32610.

---

*Like as the thrush in winter, when the skies*
*Are drear and dark, and all the woods are bare,*
*Sings undismayed, till from his melodies*
*Odours of spring float through the frozen air, —*
*So in my heart when sorrows icy breath*
*Is bleak and bitter and its frost is strong;*
*Leaps up, defiant of despair and death*
*A sunlit fountain of triumphant song.*
*Sing on sweet singer till the violets come*
*And south winds blow, sing on prophetic bird!*
*Oh if my lips, which are forever dumb*
*Could sing to men what my sad heart has heard,*
*Life's darkest hour with songs of joy would ring,*
*Life's blackest frost would blossom into Spring.*

***Edmond Holmes***

This drawing, by Dr. Robert G. Iglesias of Tampa, a well known medical illustrator whose work has appeared in the Journal on many occasions, was submitted for this issue of The Journal devoted to the FMA Auxiliary. Dr. Iglesias practices his specialty of Ophthalmology and Otolaryngology in Tampa.

# Are local pharmacists refusing to fill your valid $R_x$ for a rational, legal drug?

# The answer may make you fighting mad.

The American medical system has traditionally rested upon two logical premises: first, that licensed physicians have satisfactorily proven their competence to treat patients and, second, that FDA-approved drugs have proven *their* favorable risk-to-benefit ratio before they are ever offered for general distribution.

Another cornerstone of our system has been that once a licensed physician prescribes an approved drug, he has the absolute right to expect retail pharmacists to honor it. And to do so without belittling or impugning his competence, ethics, or sense of responsibility.

For the most part, this system has worked fine. But it may be on the verge of breaking down, as you will see from the letter reproduced in full on the facing page. It was written by a man who is himself in a health-care-related field, but when he wrote us, he was speaking as a patient—a very concerned, disappointed patient. The disturbing question he raises is simply this: have Florida's pharmacists the right—or the professional competence—to set themselves above the doctors of their communities to act as an informal but highly effective peer review committee, passing judgement on the propriety of your $R_x$ before they will deign to fill it? From this letter, it appears that many of the state's druggists have assumed precisely this prerogative.

After you read the letter, we think—we *hope*—you'll be fighting mad. This is far more than a question of one drug manufacturer wanting to sell its products. The real issue is that if retail pharmacists can refuse to dispense Quāālude® (methaqualone) today, what's to stop them tomorrow from refusing—by the same tortured logic—to dispense benzodiazepines? Or barbiturates—both of which, incidentally, have been reported to be abused to a greater degree than has Quāālude®*

The real question is: who shall decide what prescription is or is not appropriate for a patient? Until now, no one has questioned the attending physician's absolute responsibility in this regard. We think this is how it should remain.

How do you feel about it?

We invite you to speak out...with letters to your local medical society, to your retail pharmacists and their professional groups, to your legislators, if need be.

Surely not for our sake, much as we would welcome it.

Not even, in all candor, for yours.

But for your patients... and their own inalienable right to have decisions regarding their health and well-being made by the one person who is best qualified to do so.

Their doctor.

*Drug Abuse Warning Network data through November 1978, from the Drug Enforcement Administration, Department of Justice.

***Please see following page for brief summary of prescribing information, including warnings, contraindications, and dosages.***

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Elliott Fisher, Esq.
General Counsel
Lemmon Company
P.O. Box 30
Sellersville, PA 18960

January 11, 1979

Re: Quāālude problem

Dear Mr. Fisher,

I have a long-standing sleep disorder which at one time or another has been treated by just about every medication indicated. Two or three years ago my physician prescribed Quāālude.® Finally, we had established a medication which worked for me and did not produce various undesirable side effects.

I am aware, certainly, of the abuse of this agent, but until recently this deplorable situation had no direct effect upon me. However, over the past year, I have been drawn into more personal involvement since, every two months, while trying to have my prescription filled, I have found that:

1) I must visit as many as five stores before finding one that stocks the product;
2) I am treated with disdain, to say the least, and made to feel that I am being regarded as a criminal trying to pass a forged prescription;
3) Having finally located a store with stock, I am obliged to pay 62.5% more per tablet than I ever paid before because, as the pharmacist says, "If I have to put up with all the paperwork, hassle, and the like--it's not worth it to stock the drug unless I get my price."

I must presume that pressures are being exerted upon pharmacists to boycott this product. Now, I have become involved since this situation infringes upon my civil rights--my right to have my physician's orders and proper prescription filled. Judging by the way things appear to be headed, in time I will probably not be able to get my prescription filled at all.

Realizing that this situation will almost certainly become worse with time, and that there appears to be no relief at this local level, I must look to your company to help in solving the problem. I know that your problems are complicated and multiplied by the numbers of patients in this country who, like me, face a similar situation. While I do not ordinarily pose as a champion of causes, I am angry enough to stand up and be counted before another of my rights slips away because of prejudice, fear, and/or intimidation.

Please tell me what, if anything, I can do to help prevent the eventual disappearance of an excellent and worthy pharmaceutical agent. I will do anything I can, both as a consumer and as a concerned citizen.

You may feel free to quote me, by name, in your efforts to preserve this good and valuable product. I look forward to the opportunity of doing whatever I can to help.

Sincerely,

Ronald K. Ruder
Vice President

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*Brief Summary of Prescribing Information*

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**Overdosage:** Recommended management includes prompt evacuation of gastric contents, maintenance of adequate ventilation, support of blood pressure if necessary, and the usual supportive measures for the unconscious patient. Dialysis may be helpful. Analeptics are contraindicated.
**Contraindications:** Contraindicated in patients with known hypersensitivity to methaqualone, and in women who are or may become pregnant.
**Warnings:** The hypnotic dose should be taken only at bedtime immediately before the patient retires. Not recommended for use in children. The patient on Quāālude® must be warned against driving a car or operating dangerous machinery while on the drug The patient should be warned about the possible additive effects of Quāālude® when administered with other sedative, analgesic or psychotropic drugs, or alcohol. Pending longer term clinical experience, Quāālude® should not be used continuously for periods exceeding three months. Illicit use of methaqualone or abuse of the drug for non-therapeutic purposes may lead to severe psychological or physical dependence. Caution must be exercised in administering methaqualone to individuals known to be addiction-prone or those whose history suggests they may increase the dosage on their own initiative.
**Precautions:** The possibility of the use of sedative-hypnotic drugs in suicide attempts should be kept in mind and the drugs prescribed in small quantities. Since methaqualone is metabolized in the liver, it should be given in reduced doses, if at all, to those with impaired hepatic function.
**Adverse Reactions:** *Neuropsychiatric*—headache, hangover, fatigue, dizziness, torpor, transient paresthesia of the extremities; occasional restlessness or anxiety, peripheral neuropathy has been reported *Hematologic*—aplastic anemia possibly related to methaqualone has been reported *Gastrointestinal*—dry mouth, anorexia, nausea, emesis, epigastric discomfort, diarrhea. *Dermatologic*—diaphoresis, bromhidrosis, exanthema, urticaria has been particularly well documented
**How supplied:** Quāālude®-150 (methaqualone) white scored tablets containing 150 mg. methaqualone. Quāālude®-300 white scored tablets containing 300 mg. methaqualone.
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SPECIAL ARTICLES

# Challenge of the State Board of Medical Examiners and the Sunset Act

**Benjamin M. Cole, M.D., and George S. Palmer, M.D.**

This is an era of marked interest in the emphasis upon protection of the welfare of the citizens by governmental agencies, generally called consumer protection. Many, including legislators, have wondered and asked whether we are overregulated, whether some governmental agencies are necessary or serve any useful purpose or whether an agency's existence is in the best interest of the public.

**". . . (State) agencies, boards or other regulating entities which are not determined to serve any useful purpose in the public interest and safety would become non-existent."**

In 1976 the Florida Legislature enacted the Regulatory Reform Act (Sunset Act). This set up a schedule for a review and study of the various statutes which control and delineate the requirements for citizens to enter into certain businesses, occupations and professions. Dozens of laws were on the books which established boards or other agencies governing how a person must qualify in order to practice a trade or profession. The Sunset Act provides that each of these laws be repealed every six years unless the Legislature after review and scrutiny decides to re-enact that particular statute in some form. Thus agencies, boards or other regulating entities which are not determined to serve any useful purpose in the public interest and safety would become non-existent.

The task of accomplishing these reviews was assigned to specific committees in the House and Senate by the Speaker of the House and the Senate President. In the House it is the Regulatory Reform Committee. In the Senate it is the Committee on Governmental Operations. Equal numbers of agencies undergoing Sunset scrutiny were assigned to each of these committees. The Board of Medical Examiners is under the House Committee.

To initiate the process the House Committee on Regulatory Reform sent an exhaustive questionnaire to the Board of Medical Examiners requesting statistics, procedures, forms and description of many activities over the past five years. The second step involved an appearance before Subcommittee A of the House Regulatory Committee by the members of the Board who were asked to respond initially to these questions: 1) What are the dangers which would occur from the unregulated practice of medicine? 2) What is the best type of regulatory scheme you consider necessary to protect the public from these dangers? Also there were questions about the present operation of the Board. Board members made recommendations for improvement.

**The Authors**

*BENJAMIN M. COLE, M.D.*

*Dr. Cole is a member of the Florida State Board of Medical Examiners and practices family medicine in Orlando.*

*GEORGE S. PALMER, M.D.*

*Dr. Palmer, of Tallahassee, is Executive Director of the Florida State Board of Medical Examiners.*

**If the Legislature provides for this adequately and properly with sufficient funds and personnel, it should remove the present insurmountable log-jam of cases facing the Board and its one legal prosecutor which it now employs part-time."**

The members of the Board of Medical Examiners and staff look upon the process of the Sunset Act as providing a challenge and opportunity to respond in a positive and reform-minded way in order to bring about in the 1979 legislative session needed statutory changes to enable the Board to function in the manner expected of it by the Legislature, the public and the medical profession. We are the first to admit that with the present statute, budgetary and personnel limitations we are not able to adequately, effectively, expeditiously and efficiently handle the case load and demands in the important and necessary area of physician discipline. This is very important in order to protect the public from the sick, addicted, disabled, inept, negligent, incompetent, unprofessional, sub-standard doctor of medicine. The Board has been the subject of much criticism from many quarters for its performance and results in physician rehabilitation, discipline and removal of incompetent physicians from the practice of medicine for the protection of the health, safety and welfare of the public (patients). Much of this criticism is justified.

Changes are needed so that those complaints regarding physician performance and competence, (no matter what the reason) which require formal action will result in expeditious, effective, vigorous prosecution bringing remedial or disciplinary action appropriate to the situation. This will require trained, expert investigators and lawyer prosecutors experienced and effective in the medical-legal field. They must be readily and immediately available in sufficient numbers to handle the steadily increasing case load.

If the Legislature provides for this adequately and properly with sufficient funds and personnel, it should remove the present insurmountable log-jam of cases facing the Board and its one legal prosecutor which it now employs part time. This will take people and money. The efficient functioning of the complaint — investigation — prosecution — discipline system is what is now the most important priority for the protection of the public. The most pressing and necessary need is that enough trained investigators and first class lawyers are made present and available to handle the load. We have the opportunity at hand to persuade the Legislature to "remodel" the statute and the system to accomplish what is necessary for the public protection. The Board has made many suggestions and recommendations to the Committee. Organized medicine individually and collectively can aid in a positive, supportive way by constructive suggestions. This is not the time for constant griping, criticism and bad-mouthing. The Board and any changes in the system cannot accomplish the necessary and desired level of physician discipline without the cooperation and involvement of organized medicine. This is the challenge we face in the Sunset Act and the time is now.

**"Changes are needed so that those complaints regarding physician performance and competence (no matter what the reason) which require formal action will result in expeditious, effective, vigorous prosecution bringing remedial or disciplinary action appropriate to the situation."**

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**It's good to have money and the things that money can buy,**
**But it's good, too, to check up once in a while**
**And make sure you haven't lost the things that money can't buy.**

**George Horace Lorimer**

# Medicaid
# Is There a Message Here

**H. Phillip Hampton, M.D.**

After more than a decade of trying to implement the Medicaid Law to provide health care for the indigent, there is dissatisfaction with the program in every state except Arizona which has no program.

Florida first implemented the Medicaid Law with an inadequate "bare bones" program in 1970 and an expenditure for the first fiscal year of $87,733,425 for 245,000 eligible welfare recipients. In 1977, expenditures were $219,535,566 for 450,000 eligible welfare recipients with no increase in benefits.

However, there have been a number of changes in regulations by the State Department of Health and Rehabilitative Services for the purpose of cutting costs. On January 1, 1978, the DHRS revised Administrative Rule 10C-7.53 to state "for physician services, Medicaid will cover the deductible and co-insurance only to the extent that the total payment received by the physician will not exceed the recognized Medicaid payment."

This administrative rule largely relieved the State of making payment for physician services for three of the four categories of welfare recipients eligible for Medicaid: the Aged, Blind, and Disabled. No one can be sure of how much the physicians have been required to absorb of the $60 deductible and 20% co-insurance of the Medicaid 65 patients which the State was obligated to pay prior to the administrative rule of January 1, 1978, because as of November 1, 1978, none of the claims for physicians' services have been processed.

Because of complaints by many physicians who have been providing services to welfare recipients in good faith (and completing the forms as instructed) the DHRS issued an explanatory letter on September 6, 1978, which included the following two paragraphs:

"Over the past several months, our Medicaid Fiscal Agent, SDC Integrated Services, Inc., has been programming this complex Medicaid 65 payment procedure and it is planned to be operational in several months. In an effort to advise physicians of what they may expect to receive as payment when the data processing is operational, the Department requested SDC to analyze manually a sample of the Medicaid 65 claims awaiting processing.

That analysis indicated that, for the majority of the Medicaid 65 claims, Medicare payments exceeded the recognized Medicaid payment and therefore no additional payments were due to the physicians."

This leger-de-main in bureaucratese has turned off many physicians who were attempting to participate in the Florida Medicaid program. Many are caring for their Medicare-Medicaid patients as charity for those services not paid by Medicare and do not complete the forms for Medicaid reimbursement as it costs more than they receive.

If a Medicaid patient has an illness requiring more than brief services, DHRS regulations often force costly hospitalization for care that could have been provided on a less costly ambulatory basis.

The future of Medicaid in Florida is at best conjectural. Apparently the State Government is dedicated to administration of this health care program through the welfare department and the only improvement being considered by the federal administration is a change in the law to federalize Medicaid.

I am inclined to agree with the summary statement of an article in the Harvard Business Review by a professor of the Harvard School of Business Administration: "Since regulators have great difficulty understanding and controlling the health care system, those who do possess this understanding should become more involved in the control process. We should make far greater use of physicians, consumers, administrators, and the businesses and unions that underwrite most of the health care programs. The continued use of "regulators" in the system, who are neither physicians nor consumers, can accomplish little in the area of cost control and may continue to deepen the health care crisis."

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**The Author**

*H. PHILLIP HAMPTON, M.D.*

*Dr. Hampton, a Past President of FMA is a practicing internist in Tampa. He is Chairman of the FMA Committee on Medicaid and Foundations.*

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We have had two decades of a proliferation of laws and regulations at the state and federal levels concerning financing and delivery of health care resulting in rapid increase in costs, deterioration in cooperation between government administrators and medical service providers and general dissatisfaction with the results.

A review of the Medicaid record might suggest that the answer to this dilemma is not more law and regulations at the state and federal level but more cooperation among providers, payors and administrators at the local level. Governor Leroy Collins' administration successfully used this approach over 20 years ago.

Indeed, recent departmental studies (Medical Services Redevelopment Project) recognized that Florida has a very minimal Medicaid program with irrational deficiencies in services and deficits in financing aggravated by departmental regulations and financially imposing upon the providers of services and county taxpayers. The report recommended planning for health care in conjunction with the providers to assure that program development is relevant to the realities of existing health care systems and patients' needs, creating a method for federal matching of county Medicaid expenditures and developing reimbursement agreements with providers which encourage rational need/cost decisions.

The Board of Governors of the Florida Medical Association on January 14, 1978, approved the following statement on health care for the indigent:

"**ACCESS** to medical care appropriate to their needs should be available to all regardless of socio-economic status.

**GUIDANCE** may be needed by the indigent population to appropriately utilize available health care resources. Government and the medical profession should cooperatively seek the development of methods for the Medicaid program to:

A. Encourage the appropriate selection of primary physicians or facilities.
B. Maintain stability in patient-physician relationship.
C. Foster education in preventive medical care, particularly in the ambulatory setting as opposed to institutional care.

**DELIVERY** of health care for the indigent should be in the same setting, both ambulatory and institutional, as it is provided for the rest of the population in order to insure the quality, availability, and economy of health care for all residents.

**ADMINISTRATION** of the Florida Medicaid Program should be restructured to encourage the cooperation of staff and health care providers at the community level in planning, policy and delivery of health care and permit flexibility in the development of delivery and payment methods appropriate to a variety of community needs. There should be cooperation in terms of interrelation of forms that mesh smoothly with the on-going health care program.

**FUNDING** should be realistic, oriented toward ambulatory care and in accordance with acknowledged objectives with public accountability of expenditures delineating administrative costs and health service reimbursement."

The FMA statement and recommendations of several Florida Medicaid study committees have apparently been ignored, just as the successful demonstration of Medicaid implementation in Hillsborough County was ignored in 1969.

Those who direct the Florida Medicaid program involving the annual expenditures of over $3,000,000 and the health of one-half million Florida citizens might consider the recommendations of numerous studies of the problem and of those providing the medical services in light of the dissatisfaction resulting from a decade of government regulation — there may be a message here.

• Dr. Hampton, One Davis Boulevard, Tampa 33606.

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**It is easy to be critical. The real test is to come up with constructive alternatives.**

# Laetrile: What We Know and What We Do About It

G. Tripp Jones, M.D. and Neil Abramson, M.D.

## Introduction

"She's dying! — maybe it can work."

"Someone told me of a patient who was supposed to die but Laetrile helped her and she's doing well."

"Why not try the medicine? It's just a vitamin."

"It's a free country and we should be free to choose our own medicine."

"What are they hiding? It's a conspiracy between the FDA and organized medicine. They are afraid to hurt their own credibility and their own pocket books."

These statements represent a spectrum of comments from those interested in the use of Laetrile. Their comments indicate real concern and anxiety by families on the one hand and paranoid-type expressions by a selected few on the other. The medical community views the Laetrile phenomena with justified concern about legitimizing medical quackery, but some of the responses by organized medicine resemble paranoia as well. In this article, we will attempt to summarize the history of Laetrile, what evidence there is concerning its efficacy, the current medicolegal status, and some thoughts on the future.

## History

Some authors view amygdalin as the principal constituent of Laetrile but we will use the terms "Laetrile" and "amygdalin" interchangeably. Laetrile was first used as an antineoplastic agent in the 1890's in Germany, but was discarded after excessive toxicity and lack of antineoplastic properties.[1] Ernest T. Krebs, the "Father of Laetrile," worked with the compound and experimented upon animals and some humans, but stopped the studies because of adverse effects. His son, Ernst T. Krebs, Jr., discovered a new "blend" of Laetrile in the late 1940's and applied for a government patent. Various other studies followed, and in 1970, an investigational new drug application was given to qualified researchers, but was rescinded shortly thereafter due to serious clinical shortcomings in the application.[2] This action infuriated many Laetrile supporters and brought notoriety to the Food and Drug Administration. By 1973, representatives of the American Medical Association, Food and Drug Administration, National Cancer Institute and the American Cancer Society reviewed all of the known trials and found no objective evidence of tumoricidal function.

In 1973, public interest increased greatly following the "leak" of the interoffice memo of Dr. K. Sugiura of Memorial Sloan Kettering Cancer Center concerning his unpublished study of control rats developing a 78% incidence of lung metastases as opposed to 17% of rats treated with Laetrile.[2] This work was not published and was not duplicated by him or any other investigator. Furthermore, Stock et. al. later decreed that further experimentation with Laetrile was unwarranted.[3] The Food and Drug Administration and various medical groups repudiated the compound as having no action against cancer, following which the "Laetrilists" tried to market the material as a vitamin, referred to as "Vitamin B-17." Information was presented which alluded to a lack of B-17 and a greater frequency of cancer. Conversely, ethnic groups were described who have nutritious diets and little evidence of malignancy. However, Vitamin B-17 or Laetrile has never been recognized by any authoritative nutrition group as a required dietary substance. No known deficiency diseases are found to occur with the lack of Laetrile (Vitamin B-17).

At present, it is difficult to categorize Laetrile because it has neither activity as a vitamin nor any as a drug. However, several states have passed laws which legitimize Laetrile as a drug and have forced physicians, chemists, and toxicologists to confront the effects of this compound directly and with some urgency.

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Dr. Jones is a Fellow in Hematology and Medical Oncology, University of Florida, Jacksonville. Dr. Abramson is a Clinical Professor of Medicine and Chief of Hematology and Medical Oncology, University of Florida, Jacksonville. Supported in part by Richard Thompson Memorial Fund.

## Chemistry and Pharmacology

Laetrile is a cyanogenic glucoside and occurs naturally from numerous plants including clover, sorghum, lima beans and more notably from the pits of apricots, peaches and plums. Laetrile (D-mandelonitrile-beta-D glucoside) is broken down by the action of the enzyme beta glucosidase into hydrogen cyanide, glucose, and benzaldehyde.

Chemical analysis of several samples of Laetrile in 1965 revealed concentrations of amygdalin varying from 87% to 98% along with varying amounts of phenol, sucrose, and di-isopropyl ammonium iodide.[4] Recently, Davignon et al reported that injectable products from Mexican laboratories contained significant amounts of unknown pyrogens.[5] Several ampules obtained in the past year which are confiscated from illegal suppliers contained obvious microbial growth, primarily budding yeast and fungal hyphae.[6] Davignon also noted that the ampules contained only 55% of the stated 3 gram content and that the tablets contained from 55% to 87% of the stated amount. The Food and Drug Administration, Stanford Research Laboratory and others found that a typical 500 mg. tablet of Laetrile contained from 42 mg. to 450 mg. of amygdalin and from 14% to 87% of the injectable concentration (3 grams/10 ml). Obvious contamination from bacteria and particulate matter could be seen in ampules along with extractant impurities such as isopropyl alcohol.

Most Laetrile is produced by extraction of ground apricot pits and is primarily produced in Mexico, although it is also available in Jamaica and 21 other countries.[7] Apparently, 33 kernels are required for each 500 mg. tablet and about 200 kernels for each 3 gram vial. Price ranges from 65¢ to $1.00 per 500 mg. tablet and from $6.00 to $9.00 for an ampule.[8] The cost for a full 6 month treatment course of medicine has been estimated at $2,200 to $5,000.

There have been several theories regarding the mechanism of action of Laetrile. One such suggests that Laetrile is "activated" in the body by the enzyme beta glucosidase to yield hydrogen cyanide and benzaldehyde. An enzyme, rhodanese, reported to be present in normal cells but lacking in cancer cells, catabolizes the active materials in normal cells. Hydrogen cyanide purportedly remains unaltered in cancer cells and provides intracellular lethality. However, the only known activator of Laetrile in vivo is beta glucosidase and this enzyme is present in extremely low concentrations in humans.[9] Greenberg also reported that the entire dose of Laetrile is excreted essentially unchanged in the urine.[10] In addition, there are no measurable differences in the enzyme rhodanese between normal and cancer cells. Another theory purports that liver conjugation of mandelonitrile and glucuronidase is lethal to tumor cells; however, there are no studies in vivo to substantiate this theory. Still other studies concerning the tumoricidal activity of cyanide have shown no response even after direct intratumoral administration of cyanide.[11] Finally, animal studies suggest that the toxicity of hydrogen cyanide is too great to be considered as a potentially useful chemotherapeutic agent.[12]

## Clinical and Laboratory Studies

Many animal studies both in vivo and in vitro, do not support any antitumor activity with Laetrile.[3,13-17] Mice have been used extensively and Laetrile has not resulted in any tumor response. There is a paucity of clinical studies concerning Laetrile primarily due to the illegal status of the compound and difficulties in obtaining the material from manufacturers. The few clinical reports, most of which have appeared in the foreign literature, are anecdotal and show an apparent response in cancer patients treated with Laetrile. These reports usually lack study design and validity and often rely on circumstantial evidence as the basis for showing improvement.[18-19] There are no documented studies available from Dr. Ernesto Contreras, one of the most well-known Laetrile advocates and an operator of an internationally known clinic in Tijuana, Mexico. Morrone described 10 patients with a variety of neoplasms who were followed for 17 weeks, but without longterm followup, who showed only subjective responses.[20] It is difficult to evaluate subjective responses because cancer patients often respond subjectively to placebo with a lessening of analgesic requirements and an improvement in overall "well being".[21]

Under pressure from widespread public interest and the Laetrile lobby, the National Cancer Institute undertook a retrospective study to determine the effect of Laetrile therapy on cancer.[22] Questionnaires were sent to physicians asking for cases which had shown objective responses to Laetrile. An estimated 70,000 patients in the United States have received Laetrile, but only 93 cases were submitted: of these only 66 cases were analyzable and were compared against 66 patients treated with traditional anticancer therapy taken from the files of the National Cancer Institute. A panel of 12 oncologists evaluated all 132 patients with no knowledge as to the type of treatment utilized. Their findings revealed two complete and four partial responses in the group treated with Laetrile and lend no support for any antineoplastic activity of Laetrile. As the authors rightly acknowledge, their findings should be interpreted with caution due to uncontrolled factors such as an inability to obtain a significant number of Laetrile treated cases, use

of concomitant standard therapy and use of other supportive regimens in Laetrile treated patients, and falsified records. A decision by the National Cancer Institute regarding a prospective study of Laetrile is being considered now primarily aimed at the question of Laetrile's scientific usefulness in order to answer the Laetrile proponents "once and for all."

## Toxicity

According to Laetrile supporters, the cyanoglucosides are nontoxic; however, various adverse effects have been noted. Most toxic manifestations are attributable to cyanide poisoning, since amygdalin is catabolized to hydrogen cyanide. Fatalities have been associated with parenteral ingestion,[23] however, several reports of fatal cyanide poisoning have also been associated with oral ingestion.[24-29] Ingestion of Laetrile has been shown to be associated with headaches, dizziness, rash, fever, hypotension, nausea, vomiting, diarrhea, eye movement disorders, lactic acidosis, pulmonary edema and weakness of the extremities.[24-27,30] The signs of cyanide poisoning progressing to coma have generally been observed with overdoses; however, poisoning has been noted after ingestion of apricot pits and generally appears about 30 minutes to 1 hour after ingestion of as few as 8-10 kernels.[31] Cassava beans which contain linamarin, a close chemical relative of amygdalin, may also be associated with chronic cyanide poisoning. Over the counter forms of amygdalin such as "Aprikerr," "Apricap" and "Bee-17," available in some health food stores, have also been noted to have caused cyanide poisoning. The Department of Health, Education, and Welfare has at least 37 documented cases of poisoning and 17 deaths from Laetrile as a result of the ingestion of fruit kernels.[32] As previously mentioned, Laetrile contains impurities and may cause toxicity by virtue of their transmission. The Food and Drug Administration also reviewed the toxicity of Laetrile in a drug bulletin to physicians.[33]

The treatment of Laetrile (cyanide) poisoning is the therapy of cyanide intoxication. It has recently been reviewed[2] and only highlights of treatment will be mentioned. Supportive treatment consists of adequate oxygenation, respiratory support, gastric lavage and, if needed, the judicious use of sodium bicarbonate. More definitive therapy consists of using an inhalable or injectable nitrite to form a methemoglobin complex that favors a stable cyanohemoglobin complex. Amyl nitrite is inhaled for 15-30 seconds or up to 500 mg. of sodium nitrite is given intravenously (10 cc of a 10% solution given from 2.5 to 5 cc per minute). This is followed by 10 to 25 grams of sodium thiosulfate I.V. which converts cyanide to thiocyanate, a much less toxic form. Excessive use of nitrites may induce hypotension and may be treated with methylene blue, 1-2 mg/kg IV over 5-10 minutes. Activated charcoal does not absorb cyanide and is of no use.[31]

## Legal Implications

The McNaughton Foundation has kept Laetrile in the public eye and has aided the maintenance of a large and well financed lobby. Several pro-Laetrile groups (International Association of Cancer Victims and Friends, Committee for Freedom of Choice of Cancer Therapy, National Health Federation and the Cancer Control Society) have continued to publicize the product and have tried to appeal to the emotional aspects of cancer therapy.

The medical and scientific issues have taken a backseat in many states to the political problems. In general, the medical establishments and medical regulatory agencies have denounced attempts to legalize the use of Laetrile and the supporters of Laetrile have pushed for legitimization on the basis of the possibility of "cure," the nontoxicity of Laetrile, and the "right to choose." The 1977 Bohannon decision in Oklahoma opened the use of Laetrile in the terminally ill patient. This decision was followed by a deluge of legislative activity and the passage of laws in 13 states (including Florida) legalizing the use of the compound and/or the permission for the manufacture (although none has as yet begun in the United States). Since Federal law prohibits the transport of drugs across state lines, Laetrile has to be smuggled into a state where its administration is legalized.

In order to manufacture and distribute the compound, standardized testing of the product must be carried out to assure purity and accuracy. Attempts to circumvent this obstacle by referring to the compound as a "vitamin" have failed. Perhaps one of the most important political impacts of the Laetrile controversy is the support it has produced for a recent bill which would repeal the 1962 Kefauver-Harris amendments to the Food, Drug and Cosmetics Act. The Kefauver-Harris amendments required that drugs have proven efficacy and safety before marketing. These amendments indicate that the absolute freedom to choose one's own medication could be restrained if public danger might occur from the sale and use of worthless and potentially toxic drugs. This is the basic principle by which the FDA has attempted to enforce various regulations on Laetrile. Interestingly, the government of Mexico moved to terminate production of Laetrile since no antineoplastic activity was found.[34]

## Laetrile in Florida

On May 13, 1977, Governor Reubin Askew signed into law House Bill No. 768 legalizing the use of Laetrile for cancer patients in Florida. The law specifies that the compound can be administered only by a physician who must first inform the patient in writing that the compound has not been approved by the Food and Drug Administration. The law also provides that physicians cannot be reprimanded by the state licensing board nor lose hospital privileges for administering Laetrile. The obstacle to the use of Laetrile in Florida is the unavailability of a manufacturer within the state and the illegality of interstate transport. Despite the obstacles, Laetrile does find its way into Florida and a few physicians are using the compound. Most physicians do so under pressure from patients and family whereas a rare physician does so with conviction.

## Ethical Use of Laetrile

There have been many opnions both pro and con concerning the ethics of a physician giving Laetrile to a patient. Laetrile proponents and much of the public point out that dying patients should be allowed to pursue any treatment course desired, the so called "Freedom of Choice" movement. On the other hand, others state that although granting a dying patient a last wish may seem simple and innocuous, if it permits the use of an unproven antineoplastic and potentially toxic compound to be legalized, then the public is being deceived by implication that an agent is effective against cancer.[7] Some hold that the concern for public welfare must have precedence over compassion for a dying person's last wish. Many physicians hold that the use of an unproven therapy for cancer postpones the use of standard and accepted medical therapy. This delay may allow the neoplasm to proliferate at the expense of the host and may result in a high probability of metastases and a lesser chance for good response to standard therapy. This is a justifiable statement as long as Laetrile shows no antineoplastic properties.

A new problem facing physicians concerns the liability incurred by administering a medically unproven drug. In Florida, as mentioned previously, physicians are not subject to disciplinary action by any governing medical body. However, this law makes no mention concerning the possibility of malpractice in using Laetrile. At least one state's malpractice insuring company (Nevada) has refused to insure physicians who use Laetrile.

A new controversy amongst physicians concerns the question of whether there should be a government sponsored controlled trial of Laetrile. Would it be ethical to allow such clinical trials to take place? Those who favor initiation of a double blinded well engineered trial claim that this will end speculation and would permit an answer as to whether Laetrile is an effective oncocidal agent or a worthless nostrum.[35-36] Others have responded negatively by indicating that they could not in clear conscience participate in a double blind trial which would give to some of their patients a compound that has been shown to have no efficacy.[7,37] As indicated earlier, a decision on this trial has not yet been made since many of the physicians at the National Cancer Institute and many of their consultants are divided on the issue.

## Conclusion

The only sure fact we have is that there will continue to be physicians, politicians, nutritionists, sociologists and the lay public debating the pros and cons of Laetrile in the foreseeable future. Amid the medical, scientific, and political problems, we are faced by a schism that may be widening between the physician and the patient, his family, and friends. The Laetrile proponents have engendered a hostile feeling toward the medical establishments by idealizing the patient as the "underdog." The desperate patient may rebel against his physician, knowing that the "Forbidden Fruit"[35] (the apricot pit) has been denied him.[37-40] The issue of "Freedom of Choice" and Kefauver-Harris amendments to the Food, Drug, and Cosmetics Act should be resolved on behalf of the betterment of patient care.

We, as a medical community, would be remiss on the issue if we acted only in a defensive posture against groups or legislative actions which pose a threat to our authority if other compelling factors were involved. With the cancer patient, there are indeed other compelling facts. The cancer family is an emotionally charged unit reacting in various manners and directions, sometimes simultaneously. The family is already angry and bitter toward the medical establishment which has rendered to them the fatal diagnosis of "Cancer." In addition, the family is frightened, anxious and groping for help. They full well know the therapeutic ratio of modern cancer therapy: i.e., with a great many of malignancies (lung, stomach, colon) response rates are poor and toxicity which includes nausea, vomiting, bleeding, infections, alopecia, etc. is high. Even with the most favorable tumors (acute lymphocytic leukemia, Hodgkin's Disease, Wilms' tumor, etc.) there is a price to pay with standard and accepted therapy. Recently, the public has also learned that standard acceptable chemotherapy and radiotherapy may actually result in a truly fatal second malignancy such as acute myelogenous leukemia. So amidst these feelings and concerns and tensions, come comments from friends, acquaintances,

magazine articles of propaganda that therapy exists which is "natural." This therapy restores the "naturalness of the body," provides the "essence of a natural fruit" and is not associated with the usual chemotherapy or radiotherapy side effects. Why shouldn't this individual rebel against the establishment which denies him the "forbidden fruit"?

Prohibition of Laetrile will not end the discussions and suspicions. Although its legalization may be a serious error in a multitude of medical-social-political ways, it may provide the single important benefit of having the compound available so that no one is deprived. Its availability may lead to its disrepute when glaring successes do not accompany its use. In addition, perhaps we should not be overly concerned about using a useless agent for we have so many of them available and legalized: Vitamin E has no proven benefit in myocardial disease, vitamin C provides little if any protection from the common cold, and warfarin compounds may be lethal yet are still of questionable benefit in a number of the disease states for which they are used.

This review provides no supportive evidence of an effectiveness of Laetrile other than allegations and anecdotes. However, the treatment of a cancer patient involves far more than chemotherapy and radiotherapy. The psychological, social, emotional, financial and spiritual aspects may often times outweigh hepatic dysfunction, hypoxia or marrow failure. We physicians are in a bind. Somehow we must protect our patients from inducements offered by simple cures and quackery but also we must not alienate ourselves from our patients. Our patients must not look upon us as bastions of defiance but continue to see us, as in the past, as physician, friend and partner in a disease.

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**It wasn't until quite late in life that I discovered how easy it is to say, "I don't know."**

**Somerset Maugham**

# Our Federal Government vs. The Florida Medical Association, Inc.

W. Harold Parham, D.H.A., and John E. Thrasher, J.D.

There are currently 55 separate independent agencies and organizations within the Executive Department of our federal government administering a vast array of federal regulations of business in our nation. There is no question about it being a growth industry. Current regulatory expenditures are over six times the 1970 level. The Center of Study of American Business at Washington University in St. Louis estimates the current administrative cost of $3.2 billion. These costs and expenditures do not include activities such as Internal Revenue Audit Division, Postal Authorities, Federal Bureau of Investigation, etc., or the voluminous congressional investigations. The cost of federal regulations to industry and consumer is estimated to be over $100 billion annually.

The Florida Medical Association and its related activities have certainly had its share of federal abuse this past year. Examples are:

### Justice Department vs. Florida Medical Association, Inc.

The Florida Medical Association received civil investigative subpoenaes from the Anti-Trust Division of the U.S. Department of Justice alleging activities in violation of the Sherman Anti-Trust law, specifically as it pertained to health maintenance organization activities. All documents requested were produced, briefs submitted and conferences held with investigative attorneys. The investigation is still open. To the best of our knowledge, there has been no violation of federal laws or regulations by the Florida Medical Association.

**The Authors**

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### Federal Trade Commission vs. Florida Medical Association, Inc.

This is an investigation of the FMA for allegedly restraining trade in Florida. This is a similar investigation to the Justice Department's pertaining to HMO activities. The FMA had violated no laws or regulations and after the time and expense involved, the Trade Commission has dismissed the complaint and discontinued further investigation.

### Federal Elections Commission vs. FLAMPAC

This investigation is currently pending in the federal courts "in camera" which means it cannot be discussed. To our knowledge, there has been no violation of the election law and this investigation has cost both the FMA and the federal government a small fortune.

### Federal Trade Investigation of Restraint of Trade Due to FMA's Relationship with Blue Shield of Florida, Inc.

This is an ongoing investigation which involved FMA producing all of its records and documents, correspondence, news letters, etc., dating back to 1944.

### U.S. Postal Department vs. Florida Medical Association, Inc.

The U.S. Postal Department advised the Florida Medical Association that it was revoking its third class postal permit which had been held in excess of 26 years. This decision was made by the postal service in Washington and the dictate given to the postmaster in Jacksonville. (It was interesting to note that they excluded the Florida Bar as it was an educational institution.) Adequate documents, etc., were submitted to the local postmaster to justify the continuance of the postal permit; however, he is not being allowed to make this decision. It is currently on appeal in Washington. The appropriate documents from the federal

government will be requested under the Freedom of Information Act to attempt to ascertain who initiated this harassment.

### Internal Revenue Service vs. Florida Medical Association, Inc.

The IRS has been conducting an intensive investigation of our activities for 1976 and 1977 to ascertain if there is any tax liability and whether or not to continue our 501 C-6 tax exempt status. It was the original intent of IRS to review all of our organizations such as the Foundation, FLAMPAC, PIMCO, etc., but this has been minimal. The investigation and audit closed with FMA paying income tax on some unrelated income.

### Internal Revenue Service vs. Florida Medical Foundation

The Internal Revenue alleged that the Florida Medical Foundation Trust (incidentally a corporate entity which does not exist) had not filed a tax return nor applied for a tax-exempt status. This investigation reached the harassment state and is now in inactive open status which will probably end up in the courts. Again, no violation of any federal law or regulation.

### Review by Justice Department Regarding Liability Insurance Underwriting

The Justice Department has demanded that the Florida Medical Association ethical standards for hospital-based physicians be discontinued as a criteria for Liability Insurance Underwriting by the Florida Physicians Insurance Reciprocal. This has been done and is now under review by the Justice Department.

### Summary

**Most small businesses in our country would be crushed or destroyed financially by the abuse of power by the Federal Government which the Florida Medical Association has witnessed. Hopefully, the Congress, in its wisdom, will repeal the abusive powers given to regulatory agencies of our Federal Government; reduce their appropriations and require them to repay the loss to any individual or legal entity from its budget for each investigation they do not prove a violation of Federal Law.**

## JFMA Considering Special Issue on Charitable Acts by Physicians

**Editors of *The Journal of the Florida Medical Association* have under consideration publication of a special issue on various types of charitable or civic medical work done by members of the FMA.**

**The concept was developed by the FMA Council on Legislation and Regulations and would cover such service as involvement of medical missionaries, work on hospital ships such as HOPE, volunteer service in disaster areas, medical care to underdeveloped countries, service in indigent clinics sponsored by churches or other organizations, Interplast, and others.**

**The editors ask that any FMA member involved in such service or knowing of any other member similarly involved please report these activities so that appropriate follow-up can be arranged.**

**Address letters to: The Journal of the Florida Medical Association, P.O. Box 2411, Jacksonville, Fla. 32203.**

# Florida Medical Association, Inc. Position Paper on Cost of Medical Care

## February 9, 1979*

It is a recognized fact that Americans have the best medical care and delivery system in the world today, and most polls indicate the public is generally satisfied with both the quality and quantity of medical services. However, it is also recognized that there are multiple factors that have contributed to a continuing increase in the cost of providing quality medical care in this country and that there are individuals who, through no fault of their own, are not able to provide for their own medical care.

After years of consumer expectation of unlimited access to health care, government promoting growth in the production of both providers and facilities, and physician willingness to provide health services, it is necessary to examine the health care delivery system in terms of its cost, its efficiency, and in some cases, its necessity. Predictably, there is a whole spectrum of views on remedies.

At one extreme are those who wish that nothing be done except to wait for the natural forces of the American free market system to make their corrections. At the other extreme are those who advocate total control by government of the methods of delivery and payment for health care services. Between those two extremes is the position of the Florida Medical Association. It is the intent and purpose of this position paper to address the problem of health care cost and utilization.

The Florida Medical Association has as one of its primary purposes the delivery of the highest quality medical care at the most reasonable cost. The FMA is also committed to the provision of medical care for all people regardless of economic status. In addition, the FMA is committed to the maintenance of our current free enterprise system of health care delivery. Any activities by government which would interfere or place a wedge between the personal doctor/patient relationship is undesirable. The FMA recognizes there are multiple mechanisms available or possible for health care delivery and the ultimate choice is that of the patient.

Within these basic premises, the Florida Medical Association supports rational modifications to our current health care system. Any modification should enhance both the health care services provided to our citizens as well as economy and efficiency of the delivery of these services.

**In response to the health cost and quality issue, the FMA has taken the following action:**

1) Established a Peer Medical Utilization Review system for Medicare in 1970. This program has resulted in identifying almost $3.5 million in over-utilized services for which repayment is now being received. This does not include the millions of dollars saved through the changes in practice patterns. The State of Florida has been offered by the Florida Medical Foundation a mechanism for the review of appropriateness of physician services for programs such as Medicaid and Workmen's Compensation. In October 1977, a contract was signed to develop a peer review system for Medicaid, but to date this has not been implemented.
2) A health insurance review mechanism has been in existence for many years to assist health insurance companies in determining usual and customary fees on a case by case review.
3) The FMA has established the Florida Health Data Corporation. This is a non-profit corporation created to develop a uniform system for the collection of health data in Florida to be used for the purposes of health planning and peer review activities.
4) The Association has requested hospitals to post laboratory and x-ray charges in hospitals and to provide copies of these charges to the medical staff. It has also requested each hospital medical staff to review their policies on routine admission orders and standing orders.

*Adopted by the FMA Board of Governors.

5) It has sponsored for over 25 years, seminars on effective office management for physicians' offices in order to reduce overhead costs.
6) Many individual hospital medical staffs have instituted programs to reduce health care costs. Examples of the effectiveness of these programs are now beginning to emerge throughout the state.
7) Patient lifestyles contribute greatly to increased health care cost. The FMA has undertaken a comprehensive public relations campaign regarding lifestyles, preventive medicine and health care cost awareness, which includes production of two 30-minute documentary films (both of which were shown on prime-time statewide television); four 30-second public service announcements on the need for medical check-ups, improved nutrition and medical advancements; one 15-minute radio program on the history of medicine; ten 5-minute radio programs on such subjects as elderly health, immunization, diet, infant nutrition, and medical costs.
8) There is a requirement for continuous formalized, postgraduate medical education to maintain membership in FMA.
9) The FMA has advocated health legislation and programs that insure the quality of medical care and advocated cost efficiency in their administration and opposed health legislation and regulations which would increase the cost of medical care.
10) In cooperation with the Florida Hospital Association, Florida league of Hospitals, Blue Cross of Florida, Blue Shield of Florida, and the private health insurance industry, the FMA has established the Florida Committee on the Cost of Medical Care to represent the National Voluntary Effort in Florida.

**Plans for the future include developing an aggressive educational program for physicians:**

1) Topics to be covered include such programs as:
   A) Cost Awareness
   B) Effective Practice Management
   C) Awareness of cost due to tests, if solely for the purpose of "defensive medicine"
   D) Resisting pressure for hospitalization , extended stay, or services when medical justification is not present and to encourage the use of out-patient services when appropriate.
2) Developing patient education programs which would help the patient participate in cost containment. Such programs would include: life style modification, education in disease processes, etc.

**In addition to the programs developed by the FMA these are appropriate actions that should be considered by hospitals and other health institutions:**

1) Charges for commonly ordered procedures and drugs should be readily accessible to the physicians. Medical charts should include cumulative charges for each patient. Standard admission orders should be discouraged.
2) Gratuitous services not required for medical care should be optional and should not be reimbursed by third parties, i.e., television, deluxe meals and rooms, telephones, etc.
3) Encourage a careful evaluation by hospital medical staff of optimal and efficient use of beds and equipment requested, including coordination with other facilities in the community when contemplating expansion of facilities, services and equipment.
4) Encourage the use of out-patient facilities for medical and surgical services.
5) Encourage physician participation in cost efficiency evaluation by hospitals.

**A major portion of Americans are covered by some form of health insurance. It is important that a review of the quality of this coverage be made. This should include careful examination of:**

1) Benefits offered in relation to potential losses to the consumer as a result of illness or accident.
2) Setting minimum standards for health insurance contract benefits.
3) Establishment of mandatory deductibles and co-insurance in all policies.
4) Programs to return dividends to policyholders for reduced utilization.

**State Government can be an invaluable partner in the cost containment effort.**

1) The emphasis of the Medicaid program should be changed from one of crisis intervention to one of primary care and prevention. The Medicaid program should also pay a "fair share" of bills so that we are not forced to impose a "sick tax" on paying patients.
2) There should be more emphasis and funding placed on preventive health care programs — e.g., health education, screening programs, etc.
3) There should be a review of present state regulatory functions — inspections, certificate of need, etc. — to determine cost effectiveness.
4) There should be developed a valid state health manpower plan. This plan should take a long range look at production needs for various types of health manpower and investigate means to appropriately use allied professionals without fragmenting the

physician—directed delivery team. This plan should also look at the appropriateness of certification rather than licensure for most of the allied professions.

5) Provide health cost impact statements for all proposed statutes and rules.
6) Require all certifying and regulatory agencies to provide health cost impact statements when changes are required.

This paper contains general statements that the Florida Medical Association believes, if implemented, would be a significant and effective response to the world wide concern over health care cost inflation. The members and staff of the Association stand ready to assist any public or private agency in developing details for the benefit of the people of Florida.

# Insurance Reciprocal Reports Are Distributed

FMA President O. William Davenport, M.D., distributed the following memorandum in February to Delegates and Alternates, FMA House of Delegates and the Presidents of FMA county medical societies:

"The House of Delegates in 1975, facing a potential medical malpractice crisis, authorized the Board of Governors to form a vehicle for providing professional liability insurance coverage to its members in the event it became necessary. Following the lawsuit with the Argonaut Insurance Company in late summer 1975, we were without a commercial insurance carrier to provide this coverage, and your Board of Governors acted in a responsible manner and created the FMA-PLI-Trust, which later became the Florida Physicians' Insurance Reciprocal, and PIMCO, the managing agency for the Trust and the Reciprocal, and began providing coverage on December 1, 1975. This was accomplished in the private sector without dependence upon Government and without the resulting mandates and restrictions.

"Enclosed is a 37-month consolidated report of the finances of the Trust and the Reciprocal and an update of the features of the plan which is offered by the Reciprocal. In reviewing the consolidated report, you will note that it relates a story of success primarily because of the tort reforms sponsored by the Florida Medical Association and enacted by the Legislature during 1975 through 1978 and because of the willingness of physicians to participate in their own insurance company. The report reflects:

1. Three dividends during 1977 and 1978 in the amount of $4,281,000;
2. Reduction of rates for 1979;
3. Optional increased limits of coverage to $1½ million;
4. Approximately $40 million in reserves, surplus, and other assets which produce income to the Reciprocal; and
5. The lowest administrative cost of any major professional liability insurance carrier in the country — less than 7 percent.

"This report is being sent to every member of the Florida Medical Association. It not only serves as an update of a previous action of the House of Delegates but also is an outstanding example of what physicians can accomplish through the structure of organized medicine when faced with a crisis even as complicated as making professional liability insurance available at decreasing premiums."

# Tuberculosis Similis Syphilis

Clifford H. Cole, M.D., M.P.H.

**Abstract: Undetected latent tuberculosis may be a principle cause for the increasing prevalence of late, active tuberculosis in Florida. Prevention is deterred by a disproportionate emphasis upon the late form of the disease.**

**Tuberculosis and syphilis are comparable in pathogenesis. In both, a latent phase of many years commonly precedes the manifestation of late chronic disease. Late manifest syphilis is rarely seen today because of screening for latent disease is a common medical practice.**

**As the FTA test is diagnostic for latent syphilis, so the Mantoux intradermal test is diagnostic for a latent tuberculous infection. Since one in ten who first becomes infected with tubercle bacilli eventually develops active disease, the tuberculin skin test should be used routinely and patients found positive should receive preventive drug therapy or be monitored periodically.**

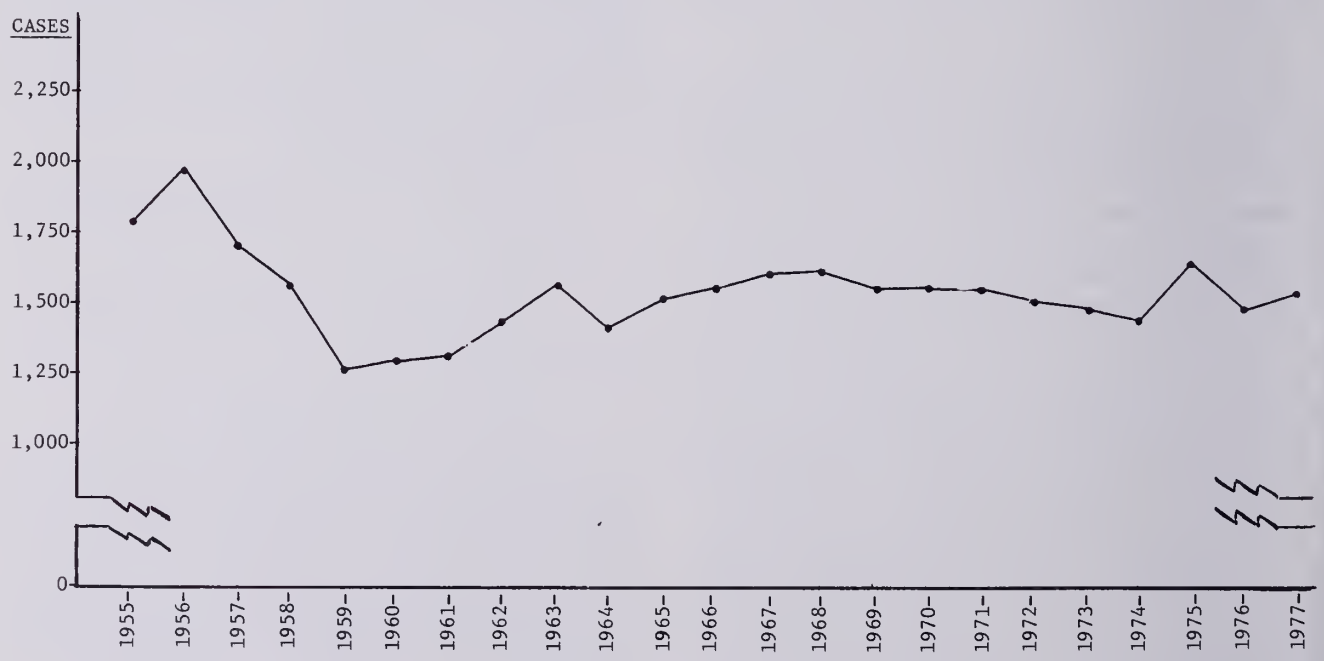
"He who knows syphilis, knows medicine," said Sir William Osler in those exciting days of medical discovery when perceptive clinical observation formed the cutting edge on the frontier of medicine. And heeding his admonition, generations of physicians applied their knowledge of syphilis to the study of disease. Time has tempered the truth of these famous words but they still stand as a landmark to medical insight — and at times as a guide in neglected eddies of modern clinical medicine.

In few aspects of medicine are the benefits of an elementary knowledge of syphilis more useful to the practicing physician than in advising patients about the natural history, treatment, and prevention of tuberculosis. Today in Florida, as rates cease to decline, as the number of new cases increase, and as tuberculosis commands recognition as a major health problem, Sir William's words invite reexamination of the infection in light of an understanding of syphilis.

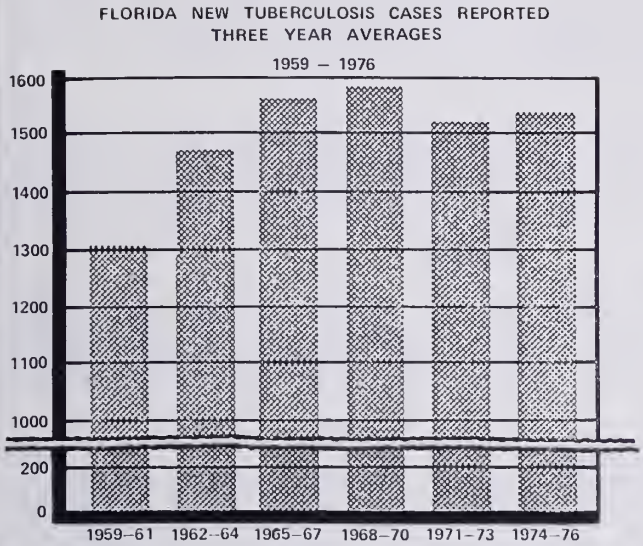
STATE OF FLORIDA

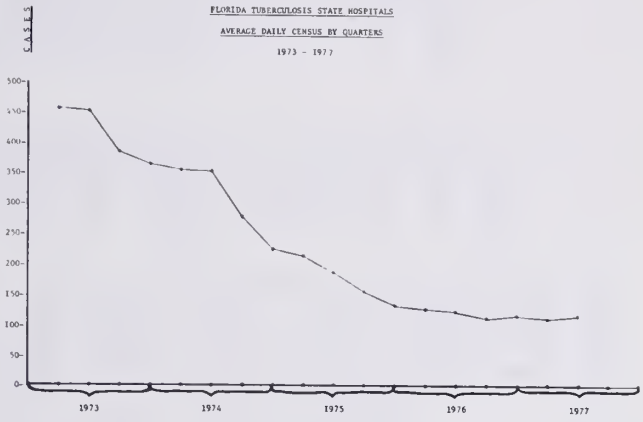
NEW TUBERCULOSIS CASES* REPORTED ANNUALLY

1955 - 1977




* Excludes Reactivations.
SOURCE: Community Tuberculosis Control Services, HRS




Similarities of pathogenesis are well known and can be stated briefly. In both diseases, the late destructive stage is the final progression of a long, silent course of infection which, in many instances, remains dormant for decades. First exposure to the causative organisms initiates the early stage, a largely benign affair characterized by a primary lesion, systemic dissemination of organisms, development of delayed hypersensitivity, and the implantation of live, dormant organisms in multiple organ systems. Latency may be of brief or long duration in both diseases and does not progress in most infected persons. Nine out of ten patients initially infected with tubercle bacilli escape significant late disease and of those infected with treponemes, three out of four are spared. For those less fortunate, appearance of late disease after years of unsuspected infection surprises the patient, and often his physician. Late syphilis may not manifest for 30 years or more and though half of active, progressive tuberculosis,may appear within two years after infection, (early progression), the remainder appears after an average period of 35 years (late progression). In the long asymptomatic interval between early infection and late progressive disease, the Mantoux (PPD intradermal) offers the best available means for detection of tuberculosis, and the FTA (flourescent treponemal antibody) is specific for syphilis.

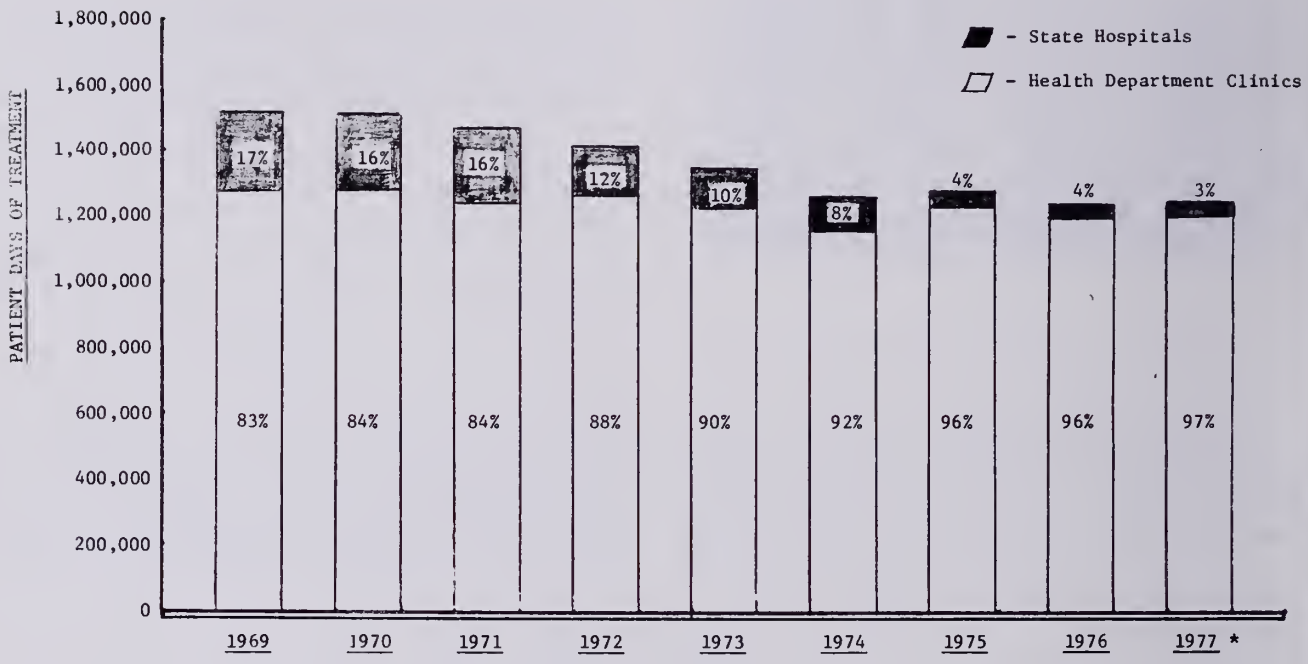
Similarities are obvious but differences are often deceiving. One remarkable difference in the natural history of the two diseases accounts for the virtual elimination of late manifest syphilis in Florida while late progressive tuberculosis remains a common disease. Unlike tuberculosis, syphilis is infectious and has disturbing symptoms in the early stage; its first appearance alerts the patient, his physician, and the public health resources of the community. The search begins to discover the source and spread of infection. In the process, latent disease is discovered by routine serological screening and treated with dispatch. It is standard medical practice for physicians to follow principles of preventive medicine, to treat asymptomatic syphilis, and to assure that latent infections do not progress to aneurisms, gummas, paresis, tabes dorsalis or other late manifestations.

Not so with tuberculosis. Here it is only the late, chronic phase of disease that is infectious, that assaults the patient, catches the eye of the physician, and challenges the energies of medical intervention. The early stage is so benign, so seldom discovered, that tuberculosis is not recognized to be spreading among the population. Latent infections pass slowly and almost imperceptibly into progressive disease. So silent is the spread, so deceptive the origin and onset of disease that the significance of a positive skin test has been lost in professional confusion for more than 50 years. Until the past decade a reactive skin test was associated more with the presence of acquired resistance to disease than with the presence of disseminated, quiescent tubercules containing foci of dormant, pathogenic organisms. This view of tuberculin sensitivity, a legacy of Koch, still persists to burden our understanding of tuberculosis. Even today, patients with latent, asymptomatic infections are officially classified as "infected without disease" and there exists a reluctance to recognize these patients as having "latent disease."

TOTAL TUBERCULOSIS PATIENT DAYS OF TREATMENT

FLORIDA 1969 - 1977

Showing percentage of patient treatment days spent in state hospitals compared to treatment days provided through health department outpatient clinics.




* Estimate based on first six months.

Presently, in Florida, tuberculosis infection is far more common than syphilis. At least 60,000 people, one in every ten adults, have a latent tuberculous infection and thousands of new infections are being acquired each year. One in 30 of those persons now infected eventually will develop active tuberculosis and may be expected to add further to the reservoir of infection for generations to come. Each year some 1,600 cases of tuberculosis emerge newly active to surprise both patient and physician. Most did not receive a PPD as an integral part of routine medical care — it is not common medical practice. Few of those with positive skin reactions were monitored periodically with chest films to detect the onset of active disease before symptoms appeared and transmission became a complication — it is not common medical practice. Few were offered isoniazid as preventive therapy — treatment is generally reserved for recent converters and others at "high risk." Many had been assured, on the basis of one single chest film, that they did not have tuberculosis and many more were advised to seek medical attention only when persistent symptoms of disease appeared.

Thus the once great hope of tuberculosis eradication becomes a mirage.

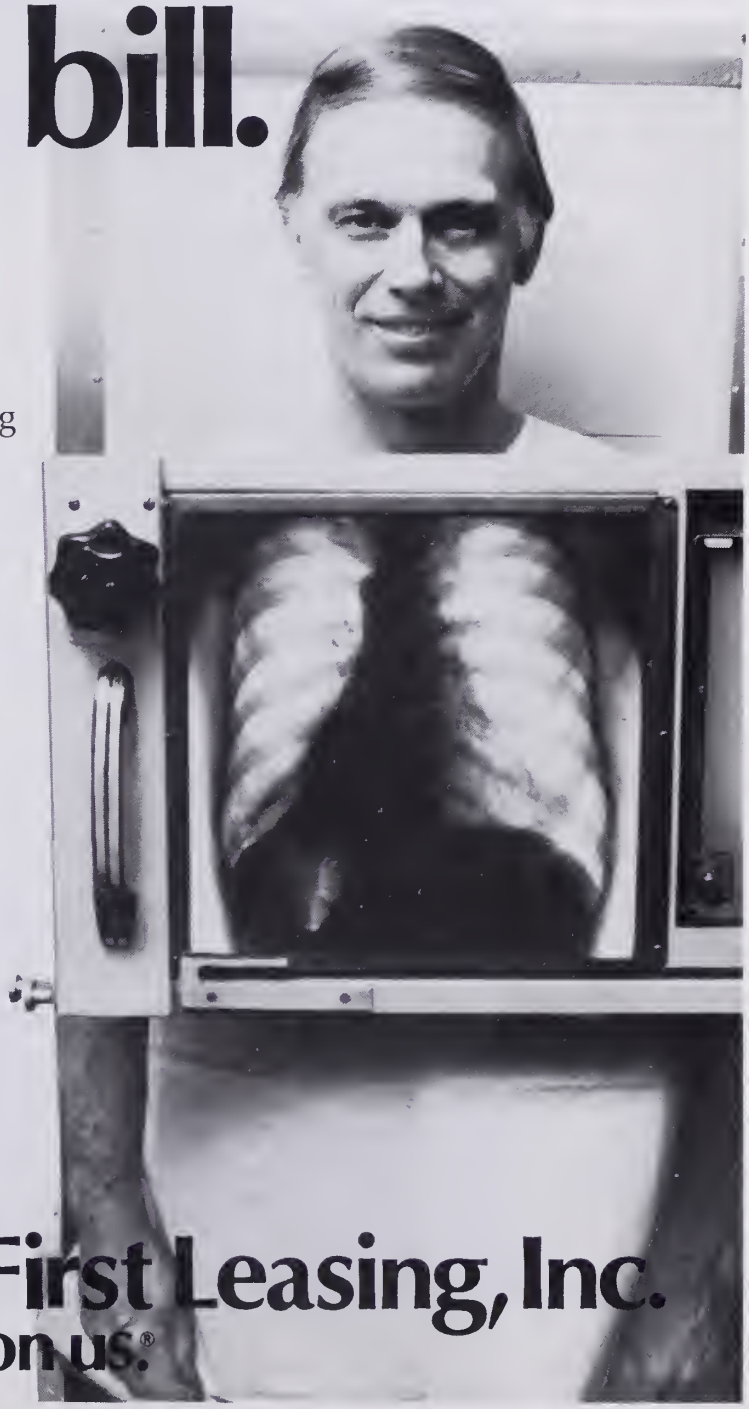
Because its pathogenesis is not generally understood and latent infections are widely ignored, tuberculosis continues as Florida's most common, preventable disease. Syphilis, a disease with a similar pathogenesis, offers a control model and suggests that control of tuberculosis can only be achieved when the routine detection of the latent phase becomes common medical practice and when patients with asymptomatic infections are accorded the same level of concern as those in the infectious phase of disease.

The model suggests that this concern may be expressed in one of two courses of action: preventive drug therapy for each person for whom there are no contraindications, or clinical and roentgenographic monitoring at periodic intervals for all PPD positive individuals not receiving preventive drug therapy.

Perhaps Sir William Osler would admonish this generation of physicians to attend a faint echo of his famous words: he who would understand tuberculosis should study syphilis.


- Dr. Cole, P.O. Box 210, Jacksonville 32201.

# It takes a healthy leasing company to pay a $5,000,000 hospital bill.



Recently a leading Florida hospital needed $5,000,000 worth of radiology equipment. So they went to the largest and fastest growing Florida-based leasing company, Southeast First Leasing, Inc.

We're an affiliate of Florida's largest banking group, with over $4 billion in combined assets. And because we can finance in every field from the marine to the medical, we checked the radiology equipment into the hospital.

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# ORGANIZATION

O. William Davenport, M.D.

# In Retrospect
# President Bill Davenport
# 1978 - 79

When Bill Davenport ascended the steps to the head table at the 1977 FMA Annual meeting as President Elect, he did so by acclamation of the House with no opposition. He had a confident smile on his face and the quiet air of a gentleman; personal qualities that have characterized his tenure of leadership.

One only has to review the tremendous scope of the activities of the Association and the boldness of its priorities during the past year as reported in the Delegates Handbook to measure the high caliber of leadership that Bill has provided. The problems facing organized medicine from all sectors and at all levels are incessant and foreboding to the private practice of medicine. They have been dealt with diligently, objectively and with great sensitivity to the needs of Florida's total physician population.

Bill has been a strong advocate of facing the issue of National Health Insurance head on and encouraged the Board of Governors' approval of this crucial issue as a top priority. His first President's Page in June of last year pointed out the need for positive action and the devastating consequences of apathy. The result has been, as most of us know, the successful adoption of the Florida Resolution by the AMA House of Delegates at its Interim Meeting in December which altered the AMA's previous position on National Health Insurance and redirected organized medicine's efforts to plug the gaps in our current health care system rather than conceding to a compulsory comprehensive NHI scheme that ultimately can only result in the complete socialization of medicine.

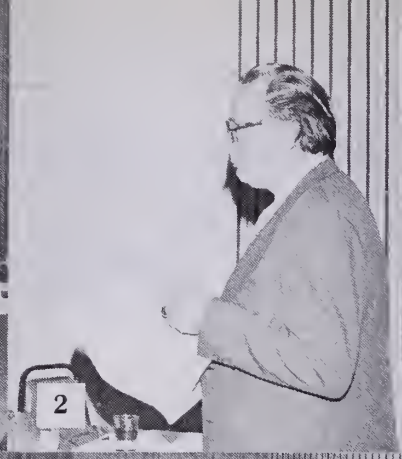
Bill has recognized the need for unity among physicians at all levels. He has, throughout the year in all forums, encouraged active involvement by physicians in organized medicine. When Florida was faced with losing a delegate to the AMA because of failing AMA membership, he made a personal appeal to all FMA members to support the AMA. He reminded us of the ever-growing threats to our profession, of the folly of devisiveness, and that only through a cohesive federation could we hope to influence the decisions that will be made in the near future affecting the course and form of the American Health Care System. Bill has also brought his efforts for unity closer to home. He has endeavored to enhance liaison and communication between FMA and component county medical societies. The FMA Leadership Conference was reinstituted in 1979, which provided a forum for disseminating vital information to CMS leaders. The Board of Governors has scheduled its meetings in different areas of the state to allow surrounding CMS to participate in the meetings and feel closer to the FMA.

Recognizing that the free enterprise system has no boundaries, Bill has taken his appeal for unity outside the confines of the organization. He has maintained dialogue with allied health professions seeking common ground for creating an atmosphere of better understanding and a cooperative liaison. He has also met jointly with representatives of other professions such as the architects, engineers and the CPA's in working toward joint cooperative efforts in areas of mutual interest to resolve common problems.

Bill has demonstrated a clear perception of the many legislative and regulatory challenges to medicine. He has also been aware of medicine's responsibility for dedication to scientific excellence and quality health care delivery. He brought together a group of dedicated and imminently qualified physicians that have guided the many activities and programs of the FMA throughout the year. His major scientific goal has been Nutrition, a subject of great import to the health and wellbeing of all Americans and one that will be prominent in this year's Annual Meeting Scientific Program. Nutrition is also the subject of a Special Issue published in the April issue of the *FMA Journal.*

The FMA today is a cohesive, viable and effective organization because the House of Delegates has through the years exercised the good judgment of electing leaders with the demonstrated abilities and character to insure the continued excellence of our organization. Bill Davenport has been such a man. He has counseled with many and has been firm in his convictions and decisions. He has been conscious of his responsibility to his fellow physicians and of the professions' responsibility to the public. The record is clear that the FMA has again chosen its leader well.

Walter C. Jones III, M.D.
Miami



## Pictorial Highlights of the January Meeting Of the FMA Board of Governors

The Board of Governors received and acted upon several reports of committee and council chairmen at its January meeting in Miami. The camera caught these notables as they presented their reports and recommendations: (1) James F. Richards Jr., M.D., Orlando, Chairman, Council on Medical Economics; (2) Dick L. Van Eldik, M.D., Lake Worth, Chairman, Council on Specialty Medicine; (3) James B. Perry, M.D., Fort Lauderdale, Chairman, Council on Legislation and Regulations; (4) James A. Winslow Jr., M.D., Chairman, Judicial Council; (5) Joseph C. Von Thron, M.D. (standing), Cocoa Beach, AMA Delegate; (6) FMA President O. William Davenport, M.D., Miami, presiding; (7) JFMA Editor Gerold L. Schiebler, M.D., Gainesville; (8) H. Phillip Hampton, M.D., Tampa, Chairman, Committee on Medicaid and Foundations; and (9) FMA Treasurer J. Russell Forlaw, M.D., Boynton Beach.

# Jacksonville Neurosurgery Symposium Honors Dr. James G. Lyerly Sr.

A Neurological Surgery Symposium honoring Dr. James G. Lyerly Sr., Florida's first neurosurgeon, was conducted at St. Vincent's Medical Center in Jacksonville on January 26.

Six guest faculty participated in the program, which was moderated by Gaston J. Acosta-Rua, M.D., of Jacksonville, one of Dr. Lyerly's associates. Approximately 200 persons attended.

Guest speakers included: James Cottrell, M.D., Associate Professor of Anesthesiology, New York University School of Medicine; Frank H. Mayfield, M.D., Clinical Professor of Neurosurgery, University of Cincinnati Medical School; William McCormick, M.D., Professor of Neurology and Neurosurgery, and Chief of the Divison of Neuropathology, Unive. sity of Texas; Albert Rhoton Jr., M.D., Professor and Chief of Neurological Surgery, University of Florida College of Medicine; Juan Taveras, M.D., Radiologist-in-Chief, Massachusetts General Hospital; and Jonathan D. Trobe, M.D., Assistant Professor of Ophthalmology, University of Florida.

Dedication of St. Vincent's Neurosurgical Unit and a reception honoring Dr. Lyerly followed the scientific program.

James G. Lyerly Sr., M.D., of Jacksonville (fifth from left), was the first neurosurgeon to practice in Florida. A Neurological Surgery Symposium was held in his honor on January 26 in Jacksonville. Flanking him are the guest speakers (left to right): Drs. James Cottrell; William McCormick; Albert Rhoton Jr., Frank Mayfield; Lyerly; Jonathan Trobe; Juan Traveras; and Gaston Acosta-Rua.

# The FMA Public Relations Program

**Vernon B. Astler, M.D.**

Few can deny that we are in an era of rapid social change, an age of action and visibility. Organizations and leaders who were once accustomed to determining events are now faced most of the time with coping with events.

Our profession traditionally has ministered to our patients under a banner of excellence, or what Victor Fuchs termed the "technologic imperative", or offering the best technical skill and care available at all times regardless of cost. And so our profession with the highest moral and human standards has preferred to work in dignified silence. I would warn you this is 1979, a time of activism and visibility. We must work to capture favorable attention or risk being swept into subjugation by the nature and forces of our times. Through the instant and visible magic of television we often find it is not the facts of a situation but what it seems to people that determines the real outcome. For example, when television news shows the police using force on demonstrators or riotors, millions of people conclude that the police attacked the crowd.

**"We must help create the climate in which we function, rather than let that climate develop and then try to cope with or react to it."**

It is time that we physicians devote some of our time, energy, and money away from our traditional concerns and begin to cope with the public climate and attitude. Doctors continue to focus on patient care, new developments, continuing education, and a host of other medical matters, while other groups and government are restructuring the entire health delivery system. Physicians are continuing to labor in their offices, clinics, and hospitals, while outside groups and forces are shaping public attitudes which will determine whether we physicians will be able to function at all. Let us not mistake the battlefield. Human climate and opinion is largely conquered through the ammunition of the communications media. They have the bullets and this is their battlefield! Unfortunately, too many of these journalists and professionals "doing their own thing" means changing the world instead of reporting on it. Those of us who remain uninvolved are destined to be governed by those who are involved. In other words, we must help create the climate in which we function, rather than let that climate develop and then try to cope with, or react to it. Initiative is imperative! So what are our courses of action? We must determine what segment of the public we wish to reach and the best modalities available, for what evokes a favorable response from one group may fail with another and repel still another group totally. It is far more effective to operate in a favorable public environment by establishing confidence and understanding toward our profession, than to overcome the ravages of criticism and misunderstanding after they have developed. These relations begin with and relate significantly to the doctor-patient relationship. People know if you truly care. They comprehend and trust if you really communicate, and they want you to be their advisor and friend, as well as their physician. You must open that door - and I can assure you - once that relationship is established, NO lawyer, politician, or newspaper story will influence your patients otherwise. We must offer tangible evidence to our patients that there will be a doctor available, and we will relieve their pain and suffering, and that we will do our best, without compromise. As you all know, most people are fearful of disaster, and as physicians we should be a first line buffer against the shock of pain, suffering, or the fear of death. It is so elementary to be there first and then assume this helpful role. It is our distinct heritage and our peculiar advantage, as well as our responsibility.

**"We must offer tangible evidence to our patients that there will be a doctor available, and we will relieve their pain and suffering, and that we will do our best, without compromise."**

Next, let us school and train our ancillary personnel. Remember, your office receptionist or the E.R. clerk is the first person encountered upon entering the health delivery portal. For the patient, this should be a kind and sympathetic experience. Our spokesmen should be well informed and articulate. They should be drawn from within our own ranks in certain instances and be paid professionals in other instances.

Presented at the Florida Medical Association Leadership Conference, Kissimmee, Florida, January 27, 1979.

Our replys and reaction to news releases and stories should be factual and prompt. The public is sophisticated and concerned. They require understandable and meaningful answers from knowledgeable persons. Our image has been inherited through years of work and service by our professional forebearers and should not be accepted lightly or frittered away carelessly. As I have stated before, if we act like merchants and keep their hours, we can expect to be treated like merchants.

**" . . . if we act like merchants and keep their hours, we can expect to be treated like merchants."**

We must give some of our time each week to public relations - vis-a-vis with the public - whether this be a Kiwanis appearance, football team exams, or measles immunizations. We must also give some of our funds. Much for our leg work, data collection, and professional contacts must be done by experts in these fields. Our own public relations survey taken in Florida by Civic Services, and directed by Mr. Roy Pfautch, clearly indicated that doctors still are the most trusted of all occupations and professions listed, and also strongly indicated that our public and patients by and large feel that doctors *are* concerned with the well being of people and are doing their best as good citizens to provide top notch health care. They also have utmost confidence, as indicated in our Florida poll, that American medicine has achieved great breakthroughs in this century, added years to our lives, and will probably find a cure for cancer and heart disease in the next 10 years. These studies also indicated that people had most opinions or controversies cleared up by information and material received through television, and further, that the chief worry in their life was that they would get a major illness and be disabled or bedridden. People also indicated their concern about an impersonal trend developing in the medical profession So it is clear that we have inherited a glorious image and reputation from our physician predecessors. It is imperative that we continue to glorify the profession and leave that reputation untarnished for those who follow in our footsteps. With each of us, this begins with the patient-physician relationship in our day to day relationship with our patients. They trust us and believe in us, but we must continue to prove that trust, and be worthy of their belief in us.

The Florida Medical Association, through its Public Relations Department, is doing a job and will continue to enlarge upon this all important area of public concern. If we, as health providers continue to show empathy and heartfelt concerns for our patients and their physical ailments, as well as their economic problems, we shall continue to enjoy their trust, and we shall not fail.

Now, what have we accomplished during the past two years with our public relations efforts? We have first tried to increase communications within our own medical community to assure that your organization is moving forward to meet the challenges facing our profession. We have established new FMA field offices in South and Central Florida, and expanded our Capital Office in Tallahassee. The purpose of these offices is to augment and assist county medical societies with programs and activities.

**"The use of (our public relations) material throughout the state has continued to grow, indicating that we have found the right channels and presentation for utilization of FMA material on a consistent basis."**

The use of material by media throughout the state has continued to grow, indicating that we have found the right channels and presentation for utilization of FMA material on a consistent basis. In January and October of 1977, two major television documentaries were produced entitled "A Matter of Life", and the second film, "It Is Your Life". Both have amply demonstrated what can be accomplished by the use of the high impact public relations films. The unique value of these films in penetrating public consciousness was demonstrated by our excellent survey findings taken before and after the films were seen. Over 100 civic groups, schools, universities, hospitals, churches, and others have used the two films for their organizations. They have been shown in a number of states at national medical meetings, and to numerous lay professional groups.

In radio, 40% of the stations in Florida are now using our five-minute medical message program. In response to many requests, we have now added a one-minute message, which is also being well received. We are currently planning adaptation for publication of some of these messages in Spanish for areas of the state where Spanish speaking people are heavily concentrated. We also have plans for a beeper network to beam instantly major comments when a timely news story concerning a

**The Author**

*VERNON B. ASTLER, M.D.*

*Dr. Astler is a practicing general and vascular surgeon in Delray Beach - Boynton Beach, Florida. A Past President of the Florida Medical Association, he has served as FMA Public Relations Officer for the past few years.*

medical matter breaks in the state. Last year we showed several 30-second public service spots which contained a strong message in behalf of our profession. These spots with pro-health information have run free on all major stations in Florida, and if we added up the total commercial time, we would be talking about over $600,000.

**". . . we have taken the public relations effort out of the defensive posture, and we have taken it to the offensive. We are reaching out daily to remind the public what our profession is accomplishing in their behalf."**

We learned that newspapers are hungry for basic health news. A recent survey showed 80 percent of the readers polled, look for, and read, basic health hints. The FMA's Medical Message column, which is now sponsored by 37 county medical societies, and which deals with health topics of general interest, is now being presented in 172 weekly and daily newspapers throughout the state. FMA medical releases can be seen in about 50 publications, of which half use the material on a regular basis. Hospital newsletter editors and editors of company publications have been added to our mailing list this year. The FMA Speakers Bureau, headed by Dr. Edward R. Annis, has continued to demonstrate the positive value of this concept. Our initial response has been superb, and we are penetrating the hard-to-reach leadership market.

In short, we have taken the public relations effort out of the defensive posture, and we have taken it to the offensive. We are reaching out daily to remind the public what our profession is accomplishing in their behalf.

In the last analysis, the public relations program is only one part of our total commitment - to insure that the delivery of medical care be left in the hands of qualified physicians. This is the message, and this is the theme which your public relations program is building. In many ways, the response indicates clearly - that we are winning where it counts - with the people we serve.

# JAMA Meets the FMA

Few members know that the FMA was honored by a visit a few weeks back from some of the editors of *The Journal of the American Medical Association*. Mr. Robert Mayo, Executive Editor; John Callan, M.D., current Morris Fishbein Fellow; and Jeffrey Kunz, M.D., former Morris Fishbein Fellow and a current Contributing Editor, spent two days during February in Jacksonville visiting FMA editors and staff.

These gentlemen were interested in firsthand observation of a first class state medical association and its journal. One of the opportunities afforded a Morris Fishbein Fellow is to spend time at various medical journal publications both at the national and state level.

Besides being impressed with the balmy southern weather after their narrow escape from Chicago, the visitors seemed impressed with *The Journal of the Florida Medical Association* for a number of reasons. First they were suprised that so few professional journalists and staff were involved in the production of *The Journal*, yet so many Florida physicians are involved with *The Journal*. In fact, about 1,400 physicians were directly involved in some way with making the journal a reality over the last several years.

Secondly, they were impressed with the rigorous peer review (usually six to ten physicians) who critique each scientific article submitted for publication. Generally, only two or three physicians review each article for *JAMA*. The involvement of medical students on the editorial board struck them as a novel but practical and progressive idea.

Our editors and staff seemed most impressed with the number of various professional journalists and the number of specialized departments that are involved in all aspects of the production of *JAMA*. In reality, they have numerous staff and departments but still share a common problem of meeting deadlines and working under budgetary restraints just as we do.

The visit proved educational and informative to all involved. The FMA can be proud that it is a state organization held in national esteem for the quality of work it has accomplished by many dedicated members.

J.V.D.

# AAFP Prescribed Credit Will Be Available At 105th Annual FMA Meeting

The American Academy of Family Physicians has approved elements of the scientific program for the 105th Annual Meeting of the Florida Medical Association at Hollywood next month for a total of 27¾ hours of Prescribed Credit.

However, since some of the program segments for which credit was approved overlap, it will not be possible for any one physician to earn the total amount.

AAFP approved the following programs for Prescribed Credit in the amounts indicated:

Wednesday, May 23, 1:30 p.m. to 4:00 p.m. — SECTION ON CANCER AND NUTRITION — 2½ hours.

Thursday, May 24, 1:30 p.m. to 5:00 p.m. — SYMPOSIUM ON NUTRITION — 3½ hours.

Friday, May 25, 8:30 a.m. to 10:45 a.m. — SECTION ON FAMILY PRACTICE — 2¼ hours.

Friday, May 25, 1:30 to 5:00 p.m. — NUTRITION WORKSHOPS — 3½ hours.

Friday, May 25, 8:30 a.m. to 10:45 a.m., and 2:00 p.m. to 4:15 p.m. — PFIZER LABORATORIES' DIALOGUE — 4 hours (1 hour each program).

In addition, AAFP will allow one hour of Prescribed Credit for each of 12 programmed instruction offerings available on Wyeth Laboratories AutoTutors.®

The Annual Meeting Scientific Program will begin at the Diplomat Hotel on Wednesday afternoon, May 23, and will continue through midday Saturday, May 26. The Medical Education Committee of the Florida Medical Foundation has approved the total program for 20 hours of AMA Category I Credit, which FMA members may report as Mandatory Credit under the FMA CME program for members.

Other co-sponsors are the University of Miami School of Medicine, the University of Florida College of Medicine, and the University of South Florida College of Medicine.

Most of the scientific program was printed in the March issue of *The Journal*. Since that time, the Florida Society of Dermatology has completed its scientific meeting plans:

SECTION ON DERMATOLOGY
(SECTION I)
(Co-sponsored by Florida Society of Dermatology)
Friday, May 25 — 4:00 p.m. to 6:00 p.m.
Phillip Frost, M.D., Miami Beach
Program Chairman

**14th Annual Dermatopathology CPC**

SECTION ON DERMATOLOGY
(SECTION II)
(Co-sponsored by Florida Society of Dermatology)
Saturday, May 26 — 9:00 a.m. to 12:15 p.m.
Phillip Frost, M.D., Miami Beach
Program Chairman

**"A New Method for Studying Physical Properties of Nails,"** Andrew Y. Finlay, M.D., Dermatology Department, Mount Sinai Medical Center of Greater Miami, Miami Beach.

**"Immunofluorescence Studies of Connective Tissue Diseases,"** Beno Michel, M.D., Dermatology Department, Case Western Reserve School of Medicine, Cleveland, Ohio.

**"Photocarcinogenicity: Update 1979,"** Frederick Urbach, M.D., Dermatology Department, Temple University School of Medicine, Philadelphia, Pa.

**"Lichen Planus Like Actinic Keratoses — Recent Studies,"** Richard Helfman, M.D., Coral Gables.

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**To be agreeable when we disagree is a goal most of us have to keep working at.**

# William R. Stinger, M.D.
# 1924 - 1978

Last year Florida lost one of its outstanding physicians with the death of Dr. William R. Stinger. Known and respected throughout Florida and also nationally, he made many contributions to public health and medicine.

A native of Pennsylvania where he received his M.D. degree, Dr. Stinger moved to Florida in 1950 where he directed public health services in Bay County for a year before going to Johns Hopkins University for his Masters Degree in Public Health. Subsequently, he served as Director of the Florida Crippled Children's Commission. While in that position, he was instrumental in broadening the scope of services to include conditions not previously covered.

In 1960 Dr. Stinger became the Assistant Director of the Dade County Health Department where he assumed major responsibility for the development of many programs, such as the Cuban Refugee Health Program, Maternal and Infant Care, Children and Youth Project, Dade County Migrant Health Project and others. He functioned as Director of the Department for three years.

He served a four-year term on the National Migrant Health Advisory Committee. Mental health was one of his primary interests and he served on the Florida Mental Health Advisory Planning Council which was charged with the responsibility of reviewing Florida's mental health program and recommending changes to improve it. He was an original member of the Florida Task Force on Rheumatic Fever and Rheumatic Heart Disease; a responsibility he held until the time of his death. He was a long-time member of the Indian Health Advisory Committee to the National Indian Health Service.

In 1969 Dr. Stinger was appointed Regional Medical Director for South Florida to coordinate public health services for the State Department of Health and Rehabilitative Services. In this capacity he coordinated surveys of health services in a number of State institutions. Included were surveys of health services in city and county jails and youth detention centers. A report of this activity was published in the *Journal of the Florida Medical Association*. He also was involved with problems related to chronic illness and aging. Governor Kirk appointed him to the Florida Board of Examiners of Nursing Home Administrators and Governor Askew reappointed him to this position. The State Health Officer, Dr. Sowder, appointed him to chair the original committee charged with developing a basic uniform public health program for Florida. He chaired also a Task Force given to re-structuring the Division of Health. He was often called upon to represent the State Health Organization before the Legislature and to represent public health programming before many bodies, groups and task forces. He was an able and articulate speaker.

Dr. Stinger was very active in relationship with organized medicine. He served as a member of the Florida Medical Association Committee on Public Health and was Chairman of that committee for several years prior to his death. He was a diplomate of the American Board of Preventive Medicine, Fellow of the American College of Preventive Medicine, and Charter member of the American Association of Public Health Physicians. He was a long-time member of the American Public Health Association and served on its Board of Governors. He was past President of the Florida Association of County Health Officers and also the Florida Public Health Association. He was a member of the voluntary faculty of the University of Miami School of Medicine where he served as Clinical Professor of Epidemiology and Public Health. The Dean appointed him chairman of the committee to study the feasibility of establishing a school of public health.

Dr. Stinger is sorely missed by all who knew him. He was a warm person with great compassion for his fellow man; he was a friend to us all. His contributions to medicine and public health continue to benefit all of us.

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**Wisdom only comes with experience**
**And experience only comes with time.**

# 105th Annual Meeting Will Have A Different Touch

The 105th Annual Meeting of the Florida Medical Association at Hollywood later this month will be somewhat different from conventions of previous years.

For one thing, the subject of "nutrition" is something of a theme for the scientific program. Several FMA-recognized specialty groups will devote their sectional programs, wholly or partially, to nutrition, an area of major FMA interest this year.

And there will be a Symposium on Nutrition on Thursday afternoon, May 24, featuring experts in the field from Florida and elsewhere. The subject will be pursued further the next afternoon, Friday, May 25, with a half-dozen nutrition workshops dedicated to parenteral nutrition; diabetes and lipids; obesity; fads vs. facts; office nutrition; and nutrition and drugs.

All the scientific and business sessions will begin at the Diplomat Hotel on Wednesday, May 23, and continue to Sunday, May 27. The House of Delegates will have its first business meeting on Wednesday afternoon, when reports and resolutions will be referred to reference committees. The House will reconvene on Saturday afternoon, May 26, and Sunday morning, May 27, to act on all items of business.

The traditional Friday night President's Reception has been modified into a 2½ hour Special Nostalgia Theme Party, to be hosted by FMA President and Mrs. O. William Davenport, M.D., of Miami. Guests are encouraged to dress in costumes of the 1890s or 1920s, and prizes will be given for the best outfits.

Admission is $10 per person, and tickets will be available at the FMA registration area in the foyer of the Diplomat Ballroom.

Another added attraction will be what is billed as a 5,000 meter "Health Run for Fun." Dyed-in-the-wool runners will be on deck early to complete the course along the Hollywood Boardwalk before the stifling south Florida heat becomes a major obstacle.

All physicians, their families and guests are invited to participate. Each participate must pay a $4 fee and sign a release form. Application and release forms were mailed to FMA members recently with an Annual Meeting flyer.

Annual meeting speakers will include a New York congressman and a syndicated columnist.

James J. Kilpatrick will present the Baldwin Lecture at the General Session on Friday immediately preceding the FLAMPAC Luncheon. Mr. Kilpatrick is a conservative columnist and television commentator.

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# Comprehensive Care for Mental Patients Subject of AMA Conference

**A workshop on "Physicians and Chronic Mental Patients: Potentials for Community Based Care" will be conducted by the American Medical Association at Chicago's Palmer House, May 10-11.**

**Participants will examine priorities in medical education as they relate to the physician's role in providing comprehensive care to patients with long-term or severe mental disabilities. Topics to be explored will include special unmet needs of the chronic patient; patterns and deficiencies in current service deliveries; physician relationships with professionals in mental health and human service fields; legal and legislative issues; economic considerations; and major obstacles to treatment and continuity of care.**

**Information may be obtained from Ms. Suellen Muldoon, Associate Director, AMA Department of Mental Health, 535 North Dearborn Street, Chicago, Illinois 60610.**

UNIVERSITY OF MIAMI SCHOOL OF MEDICINE
DEPARTMENT OF INTERNAL MEDICINE

# SIXTH ANNUAL REVIEW COURSE FOR CERTIFICATION IN INTERNAL MEDICINE

## "FUNDAMENTAL AND CLINICAL ASPECTS OF INTERNAL MEDICINE"

**AMERICANA HOTEL** — **MIAMI BEACH FLORIDA**

August 18 — September 1, 1979

Directors: William J. Harrington, M.D. and Eric Reiss, M.D.
Program Coordinator: Jose S. Bocles, M.D.

This course is designed primarily for physicians who are preparing for certification or recertification in interna medicine. It will provide an intensive survey of those aspects of internal medicine which should be familiar tc internists qualified for certification. Pertinent basic and core information followed by a survey of recent clinica advances needed for effective patient care will be presented. **Twelve printed texts, references and self-assessmen questionnaires will be provided to all registrants, and audio-visual teaching aids will be available for self instruction and reinforcement.** This course will end ten days prior to the certification examination of the American Board of Internal Medicine, thereby providing time for assimilation. **Upon request the twelv textbooks and self-assessment questionnaires will be forwarded to each registrant before the course begins.**

A faculty especially selected for its expertise in review courses for board certification will present the following topics:

| | | | |
|---|---|---|---|
| Acid Base Disorders | Environmental Medicine | Immunology | Nuclear Medicine |
| Allergy | Gastroenterology | Infectious Diseases | Oncology |
| Cardiology | Genetics | Laboratory Medicine | Pathologic Anatomy |
| Clinical Pharmacology | Geriatrics | Nephrology | Psychiatry |
| Critical Care | Hematology | Neurology | Pulmonary Diseases |
| Dermatology | Hepatology | New Diagnostic Techniques | Radiology |
| Endocrinology & Metabolism | Hypertension | Non-invasive Procedures | Rheumatology |
| | | | Toxicology |

### *HIGHLIGHTS . . . . .*

- Audio-Visual Aids
- Learning Center
- Self-Assessment Sessions
- Patient Management Problems
- 118 Lecture Credit Hours, Category I
- Set of 12 Textbooks
- Self-Assessment Questionnaires
- Meet the Faculty Sessions
- Video Tape Symposia
- 65 Self-Instructional Credit Hours, Category I

**Registration: $600.***

**Enrollment must be limited because of extensive faculty/registrant interaction.**

For registration and information write to:

**Jose S. Bocles, M.D.**
**Department of Medicine (R760)**
**University of Miami School of Medicine**
**P.O. Box 016760, Miami, Florida 33101**
**Phone: (305) 547-6063**

*Includes tuition, sets of textbooks, self-assessment questionnaires, use of audio-visual aids, library loan c T.V. tapes, cassette tapes and sets of slides.

# FMA Auxiliary Convention — Preliminary Program
# May 23 - 25, 1979
# Diplomat Hotel, Hollywood

## WEDNESDAY, MAY 23

10:00 a.m. — 5:00 p.m. Registration for all State Officers, Chairmen and County Presidents — FMA General Registration, Foyer of the Exhibit Hall.

Pre-registration for House of Delegates, FMA General Registration, Foyer of the Exhibit Hall.

Tickets available for AWARDS and FLAMPAC Luncheons, FMA General Registration, Foyer of the Exhibit Hall and FLAMPAC Booth, Foyer of the Exhibit Hall.

Hospitality Room — Embassy Room East — Mezzanine.

10:30 a.m. — 12:30 p.m. Executive Committee Luncheon Meeting — Suite of President and President-Elect.

1:00 p.m. Pre-Convention Board of Directors Meeting for ALL STATE OFFICERS, CHAIRMEN of STANDING and SPECIAL COMMITTEES and COUNTY PRESIDENTS. (All members are welcome as guests.) Mezzanine Theatre.

6:30 p.m. — 8:00 p.m. Cocktail Party (Cash Bar), Embassy Room East, all FMA-A Delegates, State Officers and Chairmen and their guests.

## THURSDAY, MAY 24

7:30 a.m. — 8:30 a.m. Complimentary Continental Breakfast for FMA-A Delegates (Badges, please.) Mezzanine Lounge.

8:00 a.m. — 5:00 p.m. Registration at FMA General Registration, Foyer of Exhibit Hall.

Hospitality Room — Embassy Room East — Mezzanine. (Will be closed during AWARDS LUNCHEON, 12:00 p.m. to 2:00 p.m. )

ART SHOW — Exhibit Hall.

8:55 a.m. "EARLY BIRD DRAWING," Mezzanine Theatre.

9:00 a.m. — 12:00 p.m. FIRST SESSION HOUSE OF DELEGATES — Mezzanine Theatre. (Badges must be worn by the delegates and they are requested to be seated with their delegation no later than 9:00 a.m.)

Welcome Address from the AMA Auxiliary, Mrs. Manuel A. Bergnes, President 1978-79.

Memorial Service — 11:45 a.m. — First Vice President and District Vice Presidents.

12:15 p.m. AWARDS LUNCHEON — "Memory Keys That Unlock the Past." Honoring Past Presidents of FMA-A and presentation of Art Show Awards, Editor's Award, AMA-ERF, International Health, and Membership Awards, and Peggy Wilcox Trophy.

"Auxiliary Fashions from the 20's Through the 70's," Mary Ann Mathews, FMA-A President, 1973-74, Cafe Cristal.

Early Bird Drawing.

1:55 p.m. — 4:00 p.m. SECOND SESSION HOUSE OF DELEGATES — Mezzanine Theatre. (Badges must be worn by the delegates and they are requested to be seated with their delegation no later than 2:00 p.m.)

Slide Presentation of County Reports.

Installation of Officers for 1979-80, Mrs. Manuel A. Bergnes.

## FRIDAY, MAY 25

7:30 a.m. — 8:30 a.m. Post-Convention FMA-A Executive Committee Meeting — Suite of President and President-Elect.

8:00 a.m. — 3:00 p.m. Hospitality Room — Embassy Room East — Mezzanine. (Will be closed during FLAMPAC LUNCHEON.)

8:00 a.m. — 5:00 p.m. ART SHOW — Exhibit Hall.

9:00 a.m. Post-Convention Board of Directors Meeting — Mezzanine Theatre. Orientation for all 1979-80 State and County Officers, Chairmen, members and guests. Officers and Chairmen are requested to transfer all files for 1979-80 Board. Mrs. B. David Epstein, 1979-80 President, presiding.

12:15 p.m. FMA AUXILIARY and FLAMPAC "KEYS TO FREEDOM" LUNCHEON, Cafe Cristal-Les Ambassadeurs dining room.

Sing-A-Long — Mrs. O. William (Carolyn) Davenport, accompanist.

Invocation and Pledge of Allegiance — Mrs. Richard B. (Connie) Moore, FMA-A FLAMPAC Chairman.

Mrs. Thomas B. (Pat) Thames, FMA-A President, 1978-79 presiding.

6:30 p.m. FMA President's Reception, Poolside.

# Book Reviews

Book Review Editor

F. Norman Vickers, M.D.

**Early Medical History of Pinellas Peninsula. A Quadricentennial Epoch** by Frederick Eberson, Ph.D., M.D., 190 pages. Price $10.00. Valkyrie Press, Inc., St. Petersburg, 1978.

To the sparse literature upon the history of Florida medicine, Dr. Frederick Eberson has added an important contribution. He brings to this endeavor many years as a pathologist and public health physician and a long experience as a reknowned medical historian of Kentucky. When he retired to St. Petersburg some years ago he began delving into the medical history of the Pinellas peninsula. Impressed by the need for recording the largely unpublished material he uncovered, he has given us the above monograph.

The reader is rewarded with knowledge of disease among the pre-Columbian Indians based on recent paleopathological studies, indigenous medicinal herbs of the area, the medical trials of the Conquistodores, the tale of Napoleon's physician who settled in the Pinellas peninsula in the early nineteenth century, the flourishing of the mineral spas, the founding of the medical society, public health programs such as the eradication of hookworm disease and mosquitoes, the growth of hospitals, and finally biographical sketches of sixteen pioneer physicians of the area.

The book is beautifully crafted, well bound and the illustrations well reproduced. The book provides many hard-to-come-by facts and should be in the library of everyone who is a serious student of Florida history, nonmedical as well as medical.

William M. Straight, M.D.
Miami

Dr. Straight practices Internal Medicine in Miami.

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**It is always with the best intentions that the worst work is done.**

**Oscar Wilde**

**Autobiography of Dying** by Dr. Archie Hanlan. 193 Pages. Price $8.95. Doubleday and Company, Inc., Garden City, N.Y., 1979.

This book is a unique opportunity to share the experiences and feelings of a dying person. The combination of a disease (amyotrophic lateral sclerosis) the course of which gives ample time for the recording of these observations, and an observer with training in making psychological and sociological judgments, makes this a most interesting study of a man who left us a record of his experience in dying.

There are insights here for all those who deal with the dying, not only the doctors and nurses, but also clergymen, social workers, and others whose ministries bring them into contact with the terminally ill. Dr. Hanlan's analysis of his treatment in various hospitals and treatment centers could be most helpful to hospital personnel in improving the quality of the care given to all patients, not just the dying. He makes helpful observations about the change in attitude of his physicians when they discovered that they had no treatment to offer for his condition. His observations about his own feelings are incisive. He describes his feelings of anger, frustration, and helplessness as he watches his body wither away with disease. He is particularly poignant as he describes his deep feelings of guilt. This guilt he felt as being a failure as a father, for he was leaving two teen-age children without adequate preparations for their future.

He continued to teach in a large university as long as he possibly could. His fear of being dismissed because of his disabilities is very real, and his worries about being "found out" must be typical reactions of those suffering from such disease. The description of the change in the attitudes of his colleagues is telling. Reading them should help us to try diligently to keep the dying patient alive as long as possible, relationally. Dr. Hanlan felt cut off from his friends and co-workers. He felt treated as somehow different now that his disease was terminal. If dying means anything it means the end of meaningful relationships, and by cutting ourselves off from the terminally ill we insure his death sooner rather than later. This insight shared with us by a man in the process of dying is most interesting and well written. The appendix prepared by a colleague and Dr. Hanlan's wife also contains much useful material.

L. Powers McLeod
Pensacola

Mr. McLeod is Chaplain at the West Florida Hospital, Pensacola.

**Stress and the American Woman** by Nora Scott Kinzer. 288 Pages. Price $8.95. Anchor Press/Doubleday and Company, Inc., New York, N.Y., 1979.

Stress is one of the major causes of health problems facing professionals, housewives and children today. The number of women embarking on professional careers will likely double in the next decade and will they be able to succeed in this competitive world without succumbing to the high rate of stress-related illnesses that plague men? Do women react differently to stress than men? In the past they certainly have. For instance, when under stress, men tend to develop ulcers whereas women tend to weep. When under tension, men drink alcohol and women take tranquilizers; however, a professional woman cannot shed tears in the board room and having had to adopt male standards of behavior to get where they are, will they be under double stress by denying their sympathetic, people-oriented style in the competitive world of business?

The author, well-known for her research on the first female cadets to enter West Point, provides a thorough examination of these questions and more in her book. She writes that today's new managers are taught to be kind and warm and these are the characteristics that women specialize in . . . instead of denying these feminine qualities, women in the professions must accept this people-oriented style and learn to work within it. They must assist men in understanding and learning to work more within a woman's framework and all this in turn, should serve as a "natural" protection against stress-induced diseases.

The message is clear. Anxiety and its threats cannot be avoided if a person is set on reaching a goal, and the author does present some encouraging accounts of how people have survived hard blows through the exercise of discipline and self-respect. To be first in anything is a stressful situation, especially for women in a man's world.

L.R.

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**No one ever listened himself out of a job.**

**Calvin Coolidge**

# Books Received

**Receipt of the following books is acknowledged. Medical readers interested in reviewing particular books are invited to address requests to the Book Review Editor. Following acceptance of a written review for publication, a reviewer may then retain the book reviewed for his personal or favorite library.**

**Pharmacological and Toxicological Perspective of Commonly Abused Drugs** by Darryl Inaba, Ph.D., E. Leong Way, Ph.D., Kenneth Blum, Ph.D. and Sidney H. Schnoll, M.D. 44 Pages. National Drug Abuse Center, Rosslyn, Virginia, 1978.

**Currents in Alcoholism, Biological, Biochemical, and Clinical Studies,** Edited by Frank A. Seixas, M.D. 601 Pages. Illustrated. Price $31.50. Grune & Stratton, Inc., New York, 1978.

**Controlling the Use of Therapeutic Drugs: An International Comparison** edited by William M. Wardell. 263 Pages. American Enterprise Institute for Public Policy Research, 1978.

**Directory of Pathology, Training Programs 1979-80** by the Intersociety Committee on Pathology Information, Inc. 470 Pages. Illustrated. Price $25.00. Geo. W. King, Co., Baltimore, 1978.

**Culture and Comment, The New Relationships Between the Generations in the 1970's** by Margaret Mead. 177 Pages. Price $2.95. Anchor Press/Doubleday, Garden City, New York, 1978.

**Uses of Enzymes and Immobilized Enzymes** by Francis X. Hasselberger. 220 Pages. Price $14.95. Nelson-Hall Publishers, Chicago, 1978.

**The Chemistry of Human Behavior** by Herbert L. Meltzer, Ph.D. 261 Pages. Illustrated. Price $17.95 (cloth). Nelson-Hall Publishers, Chicago, 1979.

**The Brand-Name Carbo Calorie Diet** by Donald S. Mart. 367 Pages. Price $9.95. Doubleday & Company, Inc., Garden City, New York, 1979.

**Cry Babel, The Nightmare of Aphasia and a Courageous Woman's Struggle to Rebuild Her Life** by April O. Armstrong. 252 Pages. Price $8.95. Doubleday & Company, New York, 1979.

**Annual Review of Neuroscience** with 31 contributing authors. 555 Pages. Annual Reviews, Inc., Palo Alto, California, 1979.

**Norethindrone, The First Three Decades** edited by Mary Jean Pramik. 100 Pages. Syntex Laboratories, Palo Alto, California, 1978.

**Principles of Clinical Electrocardiography, 10th Edition** by Mervin J. Goldman, M.D. 415 Pages. Illustrated. Price $12.00. Lange Medical Publications, Los Altos, California, 1979.

# Others Are Saying

## The Courage To Change

George T. C. Way, M.D.

I bring you a message from the physicians of New York State. The theme of this message is "The Courage to Change." This theme is based upon the wellknown quotation of Edmund Burke, which says: "The only thing necessary for the triumph of evil is for good men to do nothing." . . .

Arthur Krock, who for many years was the chief of the Washington Bureau of the *New York Times* wrote, "The United States merits the dubious distinction of having discarded its past and its meaning in one of the briefest spans of modern history."

It should not come as a surprise or as sudden news to any of us that there is a loosely cohesive corps of intelligentsia that dwells in ivyed halls, government office buildings, bureaus and agencies; that lives and operates with the philosophy that a socialistic and egalitarian government is best for the United States. This is the hidden power in government that must never be subject to the test of the electoral process, while functioning to a large extent without firm control from those whom we choose as our leaders. We are seeing an example of the power of this hidden group with President Carter today.

Mr. Carter has been a most ineffective President. Much of his inability to perform has been that some of his ideas have been totally unacceptable to this hidden power in government. Most outstanding were his plans for reorganization of the administrative branch of the Federal Government and the elimination of the many abuses in the Civil Service System. These were not wanted, and the President with all the prestige of his office could not effect these changes.

Milton Friedman, perhaps the most outstanding economist in America today, now retired, a Nobel Laureate, currently a not-too-quiet citizen of Vermont and California, and yet a new and recent consultant to the President, and a very knowledgeable columnist at Newsweek Magazine, has eloquently voiced the problem.

"The view that if there is a problem, if there is something wrong, the way to deal with it is to pass a law, set up a governmental agency (staffed of course by the intellectuals urging this solution) and use the police power of the state to correct it, is a superfically appealing view.

"On the other hand, the view that the government is the problem, not the cure, and that the invisible hand of private cooperation through the market is far more effective than the visible hand of government, is a sophisticated, subtle view that is far harder to get across."

So we find ourselves today in the circumstances where forty percent of the total national income is spent to run all forms of government and twenty percent of all employed people work for government.

Woodrow Wilson, a most intellectual President, said, " Liberty has never come from the government . . . The history of liberty is the history of the limitation of governmental power, not the increase of it."

We are now faced with the concept of limited resources in America, be it either gasoline or finite funds for health care. Milton Friedman has summed this up very well by saying:

"We've always had a finite amount of energy . . . We had finite supplies of wood in the early pioneer days. How did we make the transition from using wood to using coal, from using coal to using oil to using natural gas? How in God's name did we make that transition without a Federal Energy Agency?"

I must call your attention to a most significant book . . . *"A Time For Truth"* by William E. Simon, former Secretary of Treasury.

In this book Mr. Simon points out that individual liberty and freedom are rapidly disappearing in this country because of too much government. He also points out that the greatest ills and problems facing this country have been created by governmental meddling. But, most importantly, he accentuates the fact that experience has shown that as soon as a country falls into the trap of governmental intervention in the aspects of everyday life, the economic growth and status of that country rapidly wanes.

A study of history will note that certain things usually take place in a country as personal liberty

disappears. One is an onslaught on the medical and legal professions, and another is the downgrading and muzzling of the press.

We are all aware of the attacks on medicine. Were you surprised at the President's attack on the legal profession? Did you have the same transitory feeling as I that it was about time that someone found fault with all those damned lawyers? But, did you after that initial feeling reflect that perhaps this attack was all part of the plan?

Ah, and there's the press whom I have come to respect more and more during the last few years. Ever since the days of Watergate with deceit, overriding of civil liberties, cover-up, lying, hate lists, bribery, outright felonies by many of those in the highest places, there was a time when I felt that all was lost. But the system worked, and many of these inequities became known. But the system worked, not because of government, but because of a free press!

Just lately, the press is beginning to feel the pressures of power to limit their freedom: court decisions allowing intrusion, search, and seizure without warrant, and reporters jailed because they refused to divulge sources of information . . .

It is in this confused and trying country of ours that medicine is struggling and groping, perhaps trying to define and redefine its proper role.

It is often suggested that change can be made by modes of access provided by the system. And, indeed, monies have been set aside by our Society, and also by the American Medical Association, for legal action in meritorious causes.

However, I must point out to you the irony of the situation, where it costs us in New York State $135,000 to make the State of New York obey the law, namely our action pertaining to Chapter 76 of the Laws of New York State. The State of New York uses a staff of salaried attorneys to oppose us — and of course these are provided through the tax base.

Supposedly we won this action, but I am not at all sure that delays in health care for the poor, which this action was all about, won't be accomplished by some devious administrative ruling or bureaucratic delaying procedure . . .

Those of us in New York State have the dubious honor of practicing in the field laboratory with all the new cockeyed concepts in the modification of the delivery of health services. Only recently has the AMA begun to realize that the problems of organized medicine in New York are the problems of the other states two years hence . . .

Along with all this we have the problems of membership, of continuing medical liability, of cost control, of attempts by government to ration medical care, of hospital-physician relationships, and lastly of communication, which in itself is no mean achievement.

It would be disasterous and short-sighted indeed if the efforts of organized medicine were restricted to the solution of day-to-day problems alone.

We in medicine have a far greater concern for our citizens and for our country, and we must sit down with responsible leaders of the press, of the legal profession, and of business, in public forum, to assess the role of government and its direction in the future of America.

The Medical Society of the State of New York is recommending to the American Medical Association that a public forum be so instituted. Such an undertaking will demand courage, it will take money, and, most of all, it will take much abuse. It is indeed worth all of that.

Any institution, such as the medical profession, which is vital to the welfare and well being of our people, can expect to be under fire and pressure from all sides. The greater our role in society, the more we will be in the spotlight.

We must not let the fear of what others, that is, government, bureaucracies and politicians etc., might do, deter our profession from its call to bring ever the best medical care for the most people.

So I say to all of you who are deeply involved in organized medicine: Stop feeling defensive; cast out your paranoia; discard your feelings of inadequacy and ineptitude. You enjoy the respect and admiration of the American people and you will continue to merit that esteem as long as you meet two criteria: One, that you continue to practice the highest level of medical care; and two, that you continue to show concern and empathy for the individual patient.

But you must ever be aware that high esteem with concomitant powers confers upon the medical profession ever greater responsibility.

You must not sit back passively and allow others to create and enact decisions. You have talent and you have skill. You should make positive propositions, not only in the delivery of health care, but in association with the above mentioned groups, in all areas that affect the lives of American citizens. You should be concerned with energy, with individual freedom, with unbalanced budgets, and with inefficient and costly government, as well as the attempt to ration health services and their burdening costs. You should be creative, innovative, and still practical. You should ally yourselves with those outside of medicine, those who care and who are concerned.

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Abstracted with permission from remarks presented by Dr. Way, President of the Medical Society of the State of New York, to the Board of Trustees of the American Medical Association.

# Some people can't see our name.

# Prevent Blindness.

Every 12 minutes someone goes blind. Yet, half of all blindness is needless. Early eye care for children can correct amblyopia. Glaucoma can be arrested... sight lost to cataracts, restored. Blinding eye injuries can be dramatically reduced by safety precautions. These all add up to saving precious sight. For more information write: National Society for the Prevention of Blindness, 79 Madison Avenue, New York, NY 10016.

BRIEF SUMMARY OF
PRESCRIBING INFORMATION

**ANTIMINTH®** (pyrantel pamoate)
**ORAL SUSPENSION**

**Actions.** Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13 μg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

**Indications.** For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

**Warnings.** *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

**Precautions:** Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

**Adverse Reactions.** The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

**Dosage and Administration.** *Children and Adults:* Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful=5 ml.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

**How Supplied.** Antiminth Oral Suspension is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg pyrantel base per ml, supplied in 60 ml bottles and Unitcups™ of 5 ml in packages of 12.

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New York, New York 10017

# When you're good people recognize you.

Highly effective
Single-dose convenience
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Pleasant tasting

**Antiminth®**
**(pyrantel pamoate)**
equivalent to 50 mg pyrantel/ml
ORAL SUSPENSION

a drug of choice in pinworm infections

Please see brief summary of prescribing information on facing page.

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ALDOMET®
(METHYLDOPA|MSD)
TABLETS: 500 mg, 250 mg, and 125 mg

MSD
MERCK SHARP & DOHME


# May & June, 1979 Meetings

| | |
|---|---|
| May 2–3 | **Connecticut State Medical Society**<br>Hartford Hilton Hotel<br>Hartford, Connecticut |
| May 2–5 | **Medical & Chirurgical Faculty of th State of Maryland**<br>Hunt Valley Inn<br>Hunt Valley, Md. |
| May 3–5 | **Oklahoma State Medical Association**<br>Williams Center<br>Tulsa, Oklahoma |
| May 3–6 | **Texas Medical Association**<br>Dallas, Texas |
| May 3–6 | **Kansas Medical Society**<br>Holiday Inn-Holidome<br>Hutchinson, Kansas |
| May 3–6 | **North Carolina Medical Society**<br>Pinehurst Hotel<br>Pinehurst, North Carolina |
| May 4–6 | **Michigan State Medical Society**<br>(House of Delegates)<br>Kalamazoo Center Inn<br>Kalamazoo, Michigan |
| May 6–10 | **Mississippi State Medical Assoc.**<br>Biloxi Hilton<br>Biloxi, Mississippi |
| May 10–12 | **Wisconsin State Medical Society**<br>Marc Plaza<br>Milwaukee, Wisconsin |
| May 16th | **Rhode Island Medical Society**<br>Biltmore Plaza Hotel<br>Providence, Rhode Island |
| May 17–18 | **Minnesota Medical Association**<br>St. Paul, Minnesota |
| May 23–27 | **Florida Medical Association**<br>The Diplomat Hotel<br>Hollywood, Florida |
| June 6–8 | **Alaska State Medical Association**<br>Shee Atika<br>Sitka, Alaska |
| June 7–10 | **South Dakota State Medical Assoc.**<br>Howard Johnson<br>Rapid City, South Dakota |
| June 16–19 | **Maine Medical Association**<br>Samoset Resorts<br>Rockport, Maine |
| June 18–20 | **Iowa Medical Society**<br>Tan-Tar-A Resort<br>Osage Beach, Missouri |
| June 27 | **Chicago Medical Society**<br>(Annual Business Meeting & Inaugur tion)<br>Starlight Inn<br>Schiller Park, Illinois |

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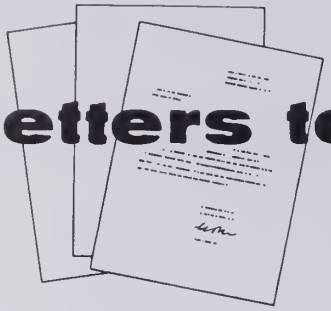

# Letters to the Editors

## MINORITY REPRESENTATION

**To the Editor:** In the October issue of *The Journal*, the section on Organization entitled "Know Your Board of Governors" was very interesting.

In this day of minority representation, there are no blacks, no Latin surnames, and no women represented on the Board; yet I know that the FMA does not consist solely of white Anglo-Saxon males.

As a female member of the FMA for over 20 years, I feel that there are surely qualified women — blacks — and Latins — to serve on the Board.

I urge that these minorities be encouraged to expand their organizational activities.

*Georgia Reynolds, M.D.*
*Professor, Nova University*
*Davie*

## MARIJUANA USE

**To the Editor:** Can you clear the air? We, the State and Federal government, are unable to control marijuana import, sale and use. The carrot of sudden bonanza is constantly luring our young people into the traffic and unfortunately many are being hurt. Your work has been to save and preserve — the law and its enforcement is more than undoing the work you have done.

Because of these things and because of mixed reports of the harm or lack of harm, or good caused by the use of the drug; I hear more and more honest lawmen asking for repeal of these laws. Any law that is unpopular and unenforceable and is not producing a definite benefit should be withdrawn.

My reason for writing is to ask you to give us the truth if it is to be found. The article in December, 1978 News and Comments, American Academy of Pediatrics, page 11 and 12 is enclosed. A good article or series of articles in the Florida Medical Journal might at this time do a lot of good.

*Henry G. Morton, M.D., Director*
*Sarasota County Health Department*
*Department HRS*
*Sarasota*

## DEAN'S PAGE DISPUTED

**To the Editor:** I would like to take issue with Dean Hollis G. Boren's views (Dean's Page JFMA, January 1979) concerning the policy of reducing the number of medical graduates, which Dean Boren believes may have a detrimental effect, and ultimately lead to a diminished quality of patient care. I do not agree that quality care is dependent upon an over-supply of doctors. The problem we are facing is not one of an adequate supply of physicians but a surplus. Mr. Joseph Califano, HEW Secretary, correctly appraised the situation when he stated, "Overall we face in the next decade an over-supply of doctors; unless we change direction we will seriously aggravate the over-supply by the end of this century." The number of medical students in U.S. medical schools in 1978 increased 48% since 1970, to 59,950, and the number of full-time faculty increased 69% during the same period to 44,762 (Undergraduate Medical Education JAMA 240:2819-2835, 1978). . .

In spite of a slight drop last year in the number of applicants to medical school, there has been a continued growth of the number of physicians. The total number of MD and DO physicians at the end of 1977 had reached a total of 437,000, which represents an annual growth rate of about 3.5%, compared to the growth of the general population of about 0.7%. The ratio of physicians to population at the end of 1977, stood at one physician per 505, one of the highest in the civilized world, if not the highest.

Since 1960 the first year enrollment of all medical schools has increased 100% to a total of 16,000. The total enrollment of all medical students has likewise increased 100% to 60,000, as has the total number of graduates from 7,000 to 14,000 (JAMA, 240:2810-2814, 1978).

With these figures it is difficult to understand why the AMA has strongly opposed efforts to limit the erection of new medical schools and the expansion of existing medical schools. In the view of the AMA, there is still a shortage of physicians, particularly in primary care, although it is conceded that this is largely a matter of maldistribution, since many smaller communities, in rural areas, find themselves without a physician, while in larger communities, there is already a physician glut, particularly in certain specialties in the surgical fields.

The problem of the growth of the number of physicians in this country and the accompanying growth of the medical education system have gained the attention of Congress, which led to the enactment of Public Law 94-484 in 1976, which states that "there is no longer an insufficient number of physicians and surgeons in the United States." If anything, the situation has been aggravated since 1976. Mr. Califano is in agreement on this point.

While I hesitate to align myself with this company, I feel that further uninhibited growth in the medical complex will do more harm than good. An increase in the doctor population will tend to lead to excesses in surgery beyond that which is claimed today, with unnecessary operations, operations performed with dubious justification, cutthroat medical practice due to the heightened struggle for economic survival, malpractice proliferation and other evils.

For these reasons, I think a turnabout is justified, and should be implemented.

*Wade S. Rizk, M.D.*
*Jacksonville*

*(Editor's Note: Dr. Boren's comment: "By all means publish Dr. Rizk's letter. My Dean's Page stands as is.")*

## BOARD OF MEDICAL EXAMINERS

**To the Editor:** Committee Substitute for House Bill 601 (SB 346) increases the disciplinary powers of the Board of Medical Examiners (BME) by mandating the temporary suspension of a physician's state license for up to 60 days under certain circumstances pending a final hearing. This new authority was requested by the BME in a letter to me in August, 1977.

I am proud to report that the FMA and county medical societies supported this legislation.

This action by the BME is required where an "*organized medical staff*" charges a physician with immoral or unprofessional conduct, incompetence, negligence, willful misconduct or the *failure to conform to the standards of acceptable and prevailing practice in his area of expertise* and in the opinion of the director and two members of the Board, the evidence is *clear, competent* and *unequivocal.*

*Organized medical staff* means "the formal organization of physicians or governing authority of a hospital, health maintenance organization, or ambulatory surgical center for the quality of all medical care provided to patients in the hospital, for maintenance of proper standards of medical care, and for the ethical and professional practices of its members."

This new legislation provides the medical profession through the BME with the authority to deal *promptly* and *effectively* with some physicians who are deficient and do not meet expected medical standards, and, therefore, do not at the time deserve the privilege to continue practice.

The hearings before a hospital committee and/or department and an organized medical staff provide *due process* to the physician who may be charged, and the physician is permitted to be represented by counsel. Prior to the enactment of this law a physician resorted to the courts to obtain an injunction against the hospital. Later on, if he *lost,* he would simply have his privileges revoked at Hospital A, but Hospitals B, C, etc. welcomed him with open arms. This lack of cooperation and communication between hospitals is *not* in the public interest.

County societies hear complaints from patients (fees, treatment, etc.) and one-on-one problems between physicians or groups. Some cases are reported to the BME. Having served on the Executive Committee of the Broward County Medical Association for many years, I have first-hand, personal knowledge of several cases that have been discussed over and over again at meeting after meeting with absolutely no tangible results because of the "threat of a lawsuit." Our new law and one enacted in 1975 *protects* physicians who *testify* against a colleague from civil suit provided the testimony was given *without malice.*

Hospital boards, commissions, trustees, owners, etc. play *no role* in this legislative process. The hospital governing board *alone* has the duty and responsibility to report cases to the BME.

It is imperative that *all parties concerned* act *promptly* and *responsibly* when a physician is charged under this law. This will assure the public of our intention to rid the profession of those physicians not deserving the *privilege of continued practice* because of their acts.

*David J. Lehman, M.D.*
*Florida House of Representatives*
*Tallahassee*

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**Attitudes are more important than facts.**

**Karl Menninger**

## FOR HOSPITAL CME'S

**To the Editor:** I am writing to request that you do a favor for the physicians responsible for Continuing Medical Education programs in the hospitals in your state. As you know, this is often an ambiguous and difficult process and those with such responsibility are frequently appreciative of any help.

These individuals are not aware of the existence of AHME, nor aware of the benefits that membership provides for CME program directors.

Over the years, AHME has sponsored several institutes directed at assisting CME progress directors. For example, our upcoming workshop in Monterey — "Patients Care Evaluation" — is directed towards CME program directors. In April 1977, a workshop was conducted on CME in the ambulatory care setting, followed by a management and leadership workshop in September. These, as well as many other AHME sponsored institutes, have offered timely information to physicians responsible for directing CME programs.

Other AHME activities that inure to the benefit of our members include important information in the *Newsletter*, such as the latest information from the LCCME, and the *AHME Journal*, which provides indepth coverage of topics related to CME. Additionally, the AHME is a full voting member of the LCCME and thus AHME members are offered a direct route for input into the deliberations of this national body. Policies made by this body have a tremendous impact on the day-to-day activities of directors of continuing medical education.

I am sure you are familiar with much of the above and I hope you will be willing to pass this information on to the CME program directors with whom you work. If you have any questions, please don't hesitate to let me know.

*Robert B. Carbeck, M.D., President*
*Association for Hospital Medical Education*
*Arlington, Virginia*

## STATE LEGISLATION TO PROVIDE ALTERNATIVES TO IN-PATIENT HOSPITAL CARE

**To the Editor:** A. MULTIPHASIC HEALTH TESTING CENTERS: — Florida was the first state to pass legislation to license and inspect Multiphasic Health Testing Centers. These centers are **private businesses run for profit** and until the passage of this legislation required only an occupational license. Advertising was **misleading** and offered a battery of tests and an electrocardiogram for a fixed fee which was interpreted by the public to be equivalent to an annual examination in a physician's office. Our new law requires the use of a disclaimer which says, **"HEALTH SCREENING TESTS MAY OR MAY NOT ALERT YOU AND YOUR DOCTOR TO SERIOUS MEDICAL PROBLEMS AND ARE NOT INTENDED TO BE A SUBSTITUTE FOR A PHYSICIAN'S EXAMINATION"** and must be on all stationery and reports and displayed in the reception area in not less than one inch block letters. The Medical Director must sign all requests to clinical laboratories, interpret and sign all reports. It is not required, **nor is it desirable** for him to have any contact with the clients of the centers (consumers). X-rays, consultations, physical examinations, pap smears and prothrombin times are **prohibited.** It is also against the law for a health testing center to refer employees of the center, including, the Medical Director and/or his associates. The Director must, in his type of practice, be qualified to interpret electrocardiograms (family practitioners, internists). It is my opinion that Multiphasic Health Testing Centers are **not** an alternative to in-patient hospital care.

B. AMBULATORY SURGICAL CENTERS: — These centers do provide a limited alternative to in-patient hospital care for some simple elective cases (oral surgery), D&C's, sub-mucous resections, T&A's, etc.) However, the cost savings is the price of one night's stay in a hospital. Some patients may pay a bill equivalent to or even more than a 24-hour stay in a hospital for a similar procedure. These centers may make it possible for some surgical and dental specialists to do excessive elective surgery that might not be done in a hospital because of scheduling problems. Therefore, although an Ambulatory Surgical Center is an alternative to in-patient hospital care for certain limited cases, it is **not** cost-saving and does **not** reduce health care costs.

C. An important element which apparently was inadvertently left out as an alternative is the fact that some physicians own all or parts of hospitals and ambulatory surgical centers. It is no secret that the occupancy rate must be between 70% and 80% in order to either break even or make a profit. I have read in various publications that there may be, at times, a tendency for physicians to admit patients to hospitals that might be treated at home because of the profit factor. Also, there is no doubt that some elective surgery such as tonsilectomies could be just as well treated medically at a fraction of the cost. This year a bill will be introduced that will require all physicians owning any portion of a hospital, nursing home, ambulatory surgical center, drug store, optical or hearing aid dispensing facility to file annual financial disclosure reports. It may

be that the Legislature feels that this legislation might reduce costs, since this bill may reduce unnecessary hospital admissions ordered to maintain a profitable occupancy rate.

D. HEALTH CARE COSTS: — These costs are rising at a rate of 16% annually, almost double the cost of living. *In order to avoid complete government take-over, there must be some alternative methods proposed that go far beyond the present third-party payment system for health care:

1) We must devise methods that will provide incentives for the consumer and the physician to be **cost conscious** by creating effective market forces, by increasing the number and diversification of health care plans (HMO's, Health Care Alliances).

2. Eliminate front-end insurances and try **"Major Risk Insurance"** with a deductible and co-insurance based on a percentage of an individual's income (10%, 5%, 0%).

3) We need a higher percentage of primary care physicians with respect to those dealing in sub-specialties (40%/60% now; goal: 60%/40%).

4) Parts of hospitals and nursing homes that are unoccupied should be closed, until there is a need for the beds.

5) A method must be found to **prioritize** medical care since at the present time if one physician recommends office care and the patient refuses because it is not covered by insurance, he will simply shop around until he finds one that **will** hospitalize him.

6) **Quality Care** does not necessarily equate with **quantity of care: — "Defensive medicine"** is no longer a viable excuse in Florida, since our malpractice crisis has been controlled and we have very few cases going to court following a **mediation panel hearing.** We are all self-insured, eliminating 20% administrative costs and effectively eliminating "settling of cases out of court to save the insurance company court costs".

7) Put a **lid on total expenditures** and then gear all regulatory controls to keep the system within that lid (similar to **education** in this country).

*David J. Lehman, M.D.*
*State Representative, District 97*
*Hollywood*

*Many of these ideas were presented by Walter McClure, Ph.D. before the Health Care Cost Commission of Minnesota, November 11, 1977.

## RE: STATE LEGISLATION TO PROVIDE ALTERNATIVES TO IN-PATIENT HOSPITAL CARE

**To the Editor:** I think Dr. Lehman, speaking as physician and legislator, raises a very important point (D.2.) when he suggests that there be deductible and/or co-insurance. Of course, this is one of the priorities adopted by the AMA in the FMA Resolution, and also one of the conclusions reached by Blue Shield/Blue Cross in their Cost Containment Studies. It is a factor recommended by the State Cost Containment Committee as being beneficial to cost controls.

In D.4., he mentions closing hospital and nursing home beds. Many hospitals in the State are closing beds in an attempt to control or decrease the cost of medical care and yet they are being threatened by health planners who are trying to pass delicensure of beds that have been closed with no assurance that those institutions which are responsibly trying to save the cost of medical care will be given first priority to reopen those beds. In fact, it is quite obvious that the health care planners of the State intend instead to allot, at the appropriate time, needed new beds to whatever institution they feel appropriate, even a new institution that was not in existence at the time the responsible hospital closed its' beds.

I think this tends to discourage hospitals from acting in responsible way and may encourage many hospitals to keep beds open at increased cost to their consumers for fear they will be delicensed if they close wings and/or beds.

Of course, all of Dr. Lehman's remarks have to do with government regulations at the State level and in D.7. he talks about putting a lid on total expenditures and then gearing all regulatory controls to keep the system within that lid similar to education in this country. He does not go on and make the next comment that this will result in some rationing of medical care, such as they have in other countries. There is no way we can avoid such rationing of medical care if we do, indeed, put a lid on total expenditures as he says it, whether it's done from the State level or from the Federal level.

We can expect an inordinate amount of attention paid this year to cost of medical care in all areas.

*James F. Richards Jr., M.D.*
*Chairman, Council on Medical Economics*

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# MEETINGS

## Approved by the FMA Committee on Continuing Medical Education

### JUNE

**Master Approach to Cardiovascular Problems — 7th Annual Conference**, June 8-10, The Contemporary Hotel, Lake Buena Vista.*

**Florida Suncoast Pediatric Conference**, June 10-13, Sheraton Sand Key Hotel, Clearwater. For information: Donald Macdonald, M.D., 1510 Barry St., Suite C, Clearwater 33516.

**Annual Combined Siminar for Physicians-Nurses-EMT/Paramedics — "Current Approaches in Emergency Medicine"**, June 14-16, Holiday Inn, Pensacola Beach. For information: Dewey P. Torres, M.D., 1200 W. Leonard St., Pensacola 32501.

**Basic Life Support — Advanced Cardiac Life Support**, June 23-24, Cozumel, Mexico. For information: Steven Watsky, M.D., P.O. Box 8013, Coral Springs 33065.

**Laparoscopy Course**, June 25-26, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th Street, Jacksonville 32209.

### JULY

**Fifth International Cuban Medical Association Congress**, July 3-7, Americana Hotel, Bal Harbour. For information: Manuel Viamonte Jr., M.D., 213 Aragon Ave., Coral Gables 33134.

**Diagnostic Ultrasound**, July 11, Naples Community Hospital. For information: Lee Light, M.D., 850 Central Ave., Naples 33940.

**Coronary Disease, Exercise Testing, and Cardiac Rehabilitation**, July 13-15, Royal Plaza Hotel, Orlando. For information: Mr. Stephen E. Mattingly, IMEC, 64 Inverness Drive East, Englewood, Colorado 80112.

**The Electrophysiology, Diagnosis and Treatment of Arrhythmias & Blocks**, July 28-31, Edmonton, Alberta. For information: Henry J. L. Marriott, M.D., St. Anthony's Hospital, St. Petersburg 33705.

**Laparoscopy Course**, July 30-31, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th Street, Jacksonville 32209.

### AUGUST

**ECG Interpretation & Arrhythmia Management**, Aug. 17-19, Orlando Hyatt, Orlando. For information: William E. James, Ph.D., 64 Inverness Dr., E., Englewood, Colorado 80112.

**Laparoscopy Course**, Aug. 27-28. University Hospital, Jacksonville For information: Robert J. Thompson, M.D., 655 West 8th St., Jacksonville 32209.

### SEPTEMBER

**17th Annual Seminar in Cardiology**, Sept. 4-11, London, England. For information: Henry J. L. Marriott, M.D., St. Anthony's Hospital, St. Petersburg 33705.

**Laparoscopy Course**, Sept. 24 25, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th St., Jacksonville 32209.

### OCTOBER

**19th Workshop in Electrocardiography**, Oct. 4-8, Clearwater Beach. Henry J. L. Marriott, M.D., St. Anthony's Hospital, St. Petersburg 33705.

**Radiology for the Emergency and Primary Care Physicians**, Oct. 10-14, Sahara Hotel, Las Vegas, Nevada. For information: W. T. Haeck, M.D., 3900 N.W. 79th Ave., Suite 469, Miami 33166.

**Fifth Panamerican Seminar**, Oct. 15-19, Wolfson Auditorium, Miami Beach. For information: Federico R. Justiniani, M.D., 4300 Alton Road, Miami Beach 33140.

**Mercy Hospital Cardiovascular Symposium**, Oct. 18-20, OMNI International Hotel, Miami.*

**Laparoscopy Course**, Oct. 29-30, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th Street, Jacksonville 32209.

### NOVEMBER

**Breast Cancer Therapy**, Nov. 6, Holy Cross Hospital, Fort Lauderdale. For information: Jon R. Fichtelman, M.D., P.O. Box 23460, Fort Lauderdale 33307.

**Laparoscopy Course**, Nov. 19-20, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th St., Jacksonville 32209.

**Uveitis Symposium**, Nov. 29-30, Medical Center, University of South Florida, Tampa.+

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***For information: Contact Division of Continuing Medical Education, D23-3, University of Miami School of Medicine, P.O. Box 016960, Miami 33101. Tel. (305) 547-6716.**

****For information: Contact Division of Continuing Education, Box J-233, J. Hillis Miller Health Center, Gainesville 32610. Tel. (904) 392-3143, or 392-3183.**

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**WARNINGS**: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. *Drug Dependence*. Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy*: Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children*: Tenuate is not recommended for use in children under 12 years of age.
**PRECAUTIONS**: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.
**ADVERSE REACTIONS**: *Cardiovascular*: Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System*: Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal*: Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic*: Urticaria, rash, ecchymosis, erythema. *Endocrine*: Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System*: Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous*: A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.
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Product Information as of April, 1976

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*Direct Medical Inquiries to*
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Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

Licensor of Merrell®

References: 1. Citations available on request—Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M.: A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

**Merrell**

8-3921 (Y587A)

# Whether overweight is a complicating factor... or just uncomplicated overweight.

# Tenuate® Dospan® CIV
## (diethylpropion hydrochloride NF)
**75 mg. controlled-release tablets**

### A useful short-term adjunct in an indicated weight loss program.

Overweight patients in certain diagnostic categories often require strict obesity control. Diethylpropion hydrochloride has been reported useful in obese patients with hypertension, symptomatic cardiovascular disease, or diabetes. While it is not suggested that Tenuate in any way reduces these complications in the overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. (Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.)

### In uncomplicated obesity.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

### Clinical effectiveness.

The anorexic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.[1] And the unique chemistry of Tenuate provides "...anorexic potency with minimal overt central nervous system or cardiovascular stimulation."[2] Compared with the amphetamines, diethylpropion has minimal potential for abuse.

**Tenuate—it makes sense. And it's responsible medicine.**

**Merrell**

For prescribing information see opposite page

# new
# 600 mg tablets
# Motrin®
## ibuprofen, Upjohn

More convenient for some of your patients.

Now there are three Motrin tablet strengths to choose from-
600 mg, 400 mg, and 300 mg

**Upjohn** The Upjohn Company
Kalamazoo, Michigan 49001, U.S.A.

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J-6999-4

April 197

# In Edema* or Hypertension* when potassium balance is a concern...

## Potassium-Sparing

# DYAZIDE®

Each capsule contains 50 mg. of Dyrenium® (brand of triamterene) and 25 mg. of hydrochlorothiazide.

## Makes Sense

**In Edema**

The triamterene in 'Dyazide' limits potassium loss and provides an additive diuretic effect to that of the hydrochlorothiazide component.

**In Hypertension**

As the hydrochlorothiazide in 'Dyazide' lowers blood pressure, the triamterene component limits potassium loss.

**Serum $K^+$ and BUN should be checked periodically**

particularly in the elderly, diabetics, and those with suspected or confirmed renal insufficiency (see Warnings). If hyperkalemia develops, substitute a thiazide alone.

**Before prescribing, see complete prescribing information in SK&F Co. literature or *PDR*. A brief summary follows:**

* **WARNING**
This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

**Contraindications:** Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

**Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired.** If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum $K^+$ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict $K^+$ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

**Precautions:** Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spironolactone is used concomitantly, determine serum $K^+$ frequently; both can cause $K^+$ retention and elevated serum $K^+$. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effect may be enhanced in postsympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine.

**Adverse Reactions:** Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

**Supplied:** Bottles of 100 and 1000 capsules; Single Unit Packages of 100 (intended for institutional use only).

**SK&F CO.**
a SmithKline company

**SK&F CO.**
Carolina, P.R. 00630

# EMPIRIN® COMPOUND c̄ CODEINE

Each tablet contains: aspirin, 227 mg; phenacetin 162 mg; and caffeine, 32 mg, plus codeine phosphate in one of the following strengths: #4—60 mg (gr 1); #3—30 mg (gr ½); #2—15 mg (gr ¼); and #1—7.5 mg (gr ⅛). (Warning—may be habit forming)

CIII

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Research Triangle Park
North Carolina 27709

ULLETIN FROM THE EVP'S OFFICE

FMA
gray paper

THE FLORIDA MEDICAL ASSOCIATION, INC. 1874

IVERSIDE AVENUE / BOX 2411 / JACKSONVILLE, FLORIDA 32203 / (904) 356-1571
AROLD PARHAM, D.H.A., EXEC. VICE PRES. / DONALD C. JONES, EXEC. DIRECTOR

il 18, 1979 No. 79-2

(Note: The Following Is A Condensed Version of This Issue of the Gray Paper)

A REPRESENTATIVES met recently with the AMA's Councils on Medical Services and Legislation to provide these councils with recommendations as to the mechanisms for implementing Resolution #62, introduced by the Florida delegation and adopted by the AMA House of Delegates at its Interim Meeting in December. Resolution #62 calls for modifications to our present health care system as an alternative to compulsory comprehensive national health insurance.

The proposed mechanisms for implementing the principles of the Florida Resolution were in response to issues posed by the AMA Councils on Legislation and Medical Services regarding implementation of the resolution. A summary outline of FMA's proposals is enclosed.

A WILL INITIATE AN HSA NEWSLETTER in the immediate future to keep county societies and physicians serving on local HSA's abreast of HSA activities on a statewide basis. The Newsletter will be published on a periodic basis by the FMA Committee on HSA's as part of its activities. A preliminary report is attached to this issue of the Gray Paper.

E VOLUNTARY EFFORT (VE) appears to be working in Florida. The Florida Committee on the Cost of Medical Care was one year old on March 4, 1979, and has already achieved a two year VE goal in one year. Florida hospital expenses increased by 17.7 percent in 1977, but dropped to 12.5 percent in 1978.

E FLORIDA COMMITTEE ON THE COST OF MEDICAL CARE (Florida's V.E. Committee) is developing a Cost Awareness Program for hospital medical staffs. The program, to be available by May 1, will be designed to last approximately one hour so that it can be readily incorporated into the regular medical staff meeting. If interested in scheduling this program for your hospital medical staff, contact Mr. John Richardson, P. O. Box 2411, Jacksonville, Florida 32203, (904) 356-1571.

The FCCMC will also be releasing a public service announcement on patient lifestyles. In conjunction with the PSA, a brochure is being developed to be made available upon request based upon the theme "What Can You Do to Help Contain Rising Health Care

Costs." The VE Committee is also planning a speakers bureau on the cost of medical care.

THE AMA HAS INITIATED a new continuing medical education service called AMA Video Clinics. The Video Clinics are "packages" of Category 1 CME programs for use by individuals or small groups. The programs, which come in 3/4-inch or 1/2-inch video tape formats, cost $15 for shipping and handling plus $5 per credit hour. For further information, contact the AMA Department of Audio-Visual and Self-Study Programs, (312) 751-6572.

REGINALD STAMBAUGH, M.D., PALM BEACH COUNTY ophthalmologist, has been awarded first place honors in the television talk show category of the first annual AMA Physician Speaker Competition. Dr. Stambaugh was selected to receive the honor from over 30 entries from all over the United States. The winning program is a regular project of the Palm Beach County Medical Society and featured dramatic film footage of cataract surgery. The county medical society will receive a $1,000 cash award.

COMMUNITY MEDICAL SERVICES ASSOCIATION INC. (CMSA) became one of the first PSRO's in Florida to submit a computer tape of the PSRO Hospital Discharge Data Set (PHDDS), a quarterly report required by the Department of Health Education and Welfare. CMSA contracts with the Florida Health Data Corporation, a nonprofit corporation established by the Florida Medical Association, Florida Hospital Association and the Florida Osteopathic Medical Association, for their data collection. This is a tremendous accomplishment for the young data abstracting corporation which is dedicated to the development of a uniform, non-duplicative, system for the collection of health data in Florida insuring that data is collected, compiled, presented fairly and objectively, while assuring confidentiality.

PRECAUTIONARY SCREENING OF ALL HEALTH DEPARTMENT EMPLOYEES is being conducted to prevent a possible outbreak of rubella. According to E. Charlton Prather, M.D., State Health Officer, those who work in any way with infants, children or young adults are being checked for either serologic proof or documentation of immunization against rubella. Employees without proof of immunization will be vaccinated unless pregnant or if contraindications exist.

TWO UPDATED PAMPHLETS ON AMA PUBLICATIONS are now available free through the AMA Order Department. "Professional Medical Information" itemizes publications on medical practice, general and scientific subjects and statistical data. The other pamphlet, "AMA Publications . . . to help you lead a healthier, happier life," is designed for the general public.

AMERICAN VOTERS WANT A BALANCED FEDERAL BUDGET and reduced government spending, according to the nations' governors who met recently in Washington. The insistence on a balanced budget narrows the chances for even the most modest form of national health insurance, which is estimated to cost about $30 billion a year. If the budget must be balanced, the $30 billion must come from existing federal programs, or be generated by higher taxes.

# CLASSIFIED ADS

**Physicians Wanted**

## FAMILY PRACTITIONERS

GENERAL PRACTITIONER: For well equipped medical clinic immediately adjacent to 120 bed skilled nursing facility; would also act as medical director for nursing home. Salary 100% of intake. Contact: Administrator, Wakulla Manor Nursing Home, P.O. Box 508, Crawfordville, Florida 32327. Phone: (904) 926-7181.

FAMILY PRACTITIONER. Growing community in northeast Florida offers immediate opportunity to establish private practice. Excellent schools, beautiful beaches, year-round outdoor recreation. Contact: Claude Weeks, Executive Director, Flagler Hospital, P.O. Box 100, St. Augustine, Florida 32084. Phone: (904) 824-8411.

FAMILY PRACTITIONER OR INTERNIST wanted to share facilities with three practitioners in solo practice. Major equipment provided. Rent $250 per month. Competent laboratory and x-ray departments with income based on use. Bookkeeping system and receptionist shared. Contact: T. C. Kenaston Jr., M.D., P.O. Box 550, Cocoa, Florida 32922.

TWO FAMILY PHYSICIANS ARE NEEDED for Panhandle area. A fine hospital in a fine area and a good place to practice medicine. Send your CV to Director, Professional Recruitment, Brookwood Health Services, Inc., 2000-D Brookwood Medical Center Drive, Birmingham, Alabama 35209, or call (205) 877-1896.

FAMILY PRACTITIONER OR OB-GYN PHYSICIAN NEEDED for 50 bed General Hospital, fully accredited, in Wauchula, Florida, Hardee County, population of approximately 17,000. Contact: Administrator, Hardee Memorial Hospital, P.O. Box 1058, Wauchula, Florida 33873. Phone: (813) 773-3101.

## SPECIALISTS

CENTRAL FLORIDA MULTI-SPECIALTY CLINIC HAS OPENING for second general surgeon. Good financial opportunity; new well equipped office near three hospitals. Write C-893, P.O. Box 2411, Jacksonville, Florida 32203.

EMERGENCY PHYSICIAN with postgraduate training or three years experience for prestigious University General Hospital in Tampa, Florida. 600 beds, 45,000 plus visits per year with new 17,000 square feet Emergency Department. Guaranteed income for 45 hours per week with two weeks education leave and two weeks vacation. Malpractice paid. Send curriculum vitae, three letters of recommendation to: Philip J. Fagan Jr., M.D., P.O. Box 9639-FL, Marina del Rey, California 90291. Phone: (213) 822-1312.

INTERNIST — CARDIOLOGIST: Two man practice seeks badly needed associate with immediate availability possible. Excellent opportunity in well established Internal Medicine, noninvasive Cardiology practice. Write C-904, P.O. Box 2411, Jacksonville, Florida 32203.

KEY WEST, MONROE COUNTY, FLORIDA KEYS. STAFF PSYCHIATRIST — Community Mental Health Clinic Evaluations and Therapy, no administrative responsibilities, excellent gross plus good fringe. Excellent location. Contact Director at Community Mental Health Clinic, (305) 294-5237, P.O. Box 488, Key West, Florida 33040.

PEDIATRICIAN: Busy central Florida two office Pediatric practice needs American board certified or eligible associate immediately. Call or write to: A. R. MacPherson, M.D., 331 N. Maitland Ave., Maitland, Florida 32751. Phone: (305) 645-1166.

EXCELLENT OPENING for energetic, Board Certified or Board Eligible Internist, with or without subspecialty in Rheumatology or Neurology for fast growing area in coastal Southwest Florida. Must desire solo practice; ample coverage. Write C-885, P.O. Box 2411, Jacksonville, Florida 32203.

ASSOCIATE IN PATHOLOGY — Ph.D. in Biochemistry with at least 5 years experience in University Hospital Clinical Chemistry Laboratory and training of residents. Expertise in DuPont ACA apparatus, SMAC auto-analyzers, GEMSAEC centrifugal analyzers, ion specific electrode analyzers, electrophoresis equipment and DNA laboratory computer as well as the usual laboratory spectrophotometric instrumentation. Position available after June 1, 1979. Excellent gross. Reply to Noel K. Maclaren, M.D., Department of Pathology, College of Medicine, Box J-275, University of Florida, 32610. This is an Affirmative Action Equal Opportunity Employer.

EMERGENCY ROOM PHYSICIAN. Salaried position. 45-hour week (daytime, M-F), overtime optional. Contact Claude Weeks, Executive Director, Flagler Hospital, P.O. Box 100, St. Augustine, Florida 32084. Phone: (904) 824-8411.

MULTISPECIALTY GROUP OF PHYSICIANS located in North Florida seeking to expand in the following specialties: Rheumatology, Gastroenterology, Hematology/Oncology, Endocrinology, and Infectious Diseases. Please send curriculum vitae to: C-928, P.O. Box 2411, Jacksonville, Florida 32203.

EMERGENCY PHYSICIANS for position with young expanding group. Liberal salary package. Send CV to I. Bloomfield, M.D., Medical Director, P.O. Box 160132 Snapper Creek Station, Miami, Florida 33116 or call (305) 596-2896.

## MISCELLANEOUS

PHYSICIANS NEEDED FOR NEW multispecialty medical center in Delray Beach, Florida. Primary care and specialty physicians, full or part time. Write P.O. Box 23606, Fort Lauderdale, Florida 33334.

PLANT PHYSICIAN. Requires Florida license, American citizenship, fluent English. 40 hour week, liberal benefits, excellent gross. Chaya McKenney, Director; Suite 902, Century Bank Tower, Pensacola, Florida 32501. Phone: 1 (904) 434-1151.

### Situations Wanted

FAMILY PRACTITIONER, 31, board eligible, seeks group, associate, partnership or solo in southern Florida. Available February 1st. Florida license applied for. Please reply: 19781 Futura Drive, Yorba Linda, California 92686.

A BOARD ELIGIBLE INTERNIST looking for a position in Florida. Solo, group or hospital-based practice. Available at any time. Contact (216) 473-0728 or,write C-920, P.O. Box 2411, Jacksonville, Florida 32203.

ANESTHESIOLOGIST, board eligible wishes to join group. Available after June 1979. Contact Dr. Dagdayan, 30 Prospect Ave., #48, Hackensack, New Jersey 07601. Phone (210) 342-2429.

POSITION WANTED: OB-GYN. Board eligible. University trained. FMG. Practice experience for two years. Relocation desired in Florida only, solo, group or hospital practice. Terms negotiable. Experienced in colposcopy, laparoscopy and infertility. Write to: C-921, P.O. Box 2411, Jacksonville, Florida 32203.

PATHOLOGIST, 34, certified in A.P. and C.P., wishes to relocate anywhere in Florida, solo or group, five years experience, Florida licensed, available after three months notice. Call: (312) 459-4085, evenings or weekends.

RADIOLOGIST — Board Certified. Seeks small hospital department, multispecialty group or clinic position. Fully trained and experienced in all special procedures, i.e., angiography, computerized tomography, ultrasound, etc. Also Nuclear Medicine. Administrative experience. All financial arrangements considered. Willing to invest. Write: P.O. Box 23151, Tampa, Florida 33622.

DIAGNOSTIC RADIOLOGIST — 39 years old, just completed residency, former private practitioner of Internal Medicine, seeks position on or near Florida west coast. Reply: Bert L. Booker, M.D., 24—41st Avenue, Isle of Palms, South Carolina 29451.

ONCOOGIST-HEMATOLOGIST-INTERNIST, 30, ABIM certified, AOA, University trained, experienced in ECOG protocols. Seeking group or partnership. Available July 1979. Call (212) 263-8312.

PATHOLOGIST (AP-CP) board eligible, Florida licensed, seeks full time position in group or hospital situation. Available July 1, 1979. Write C-927, P.O. Box 2411, Jacksonville, Florida 32203.

BOARD ELIGIBLE HOLDING BRITISH ORTHOPEDIC BOARDS and Florida license with extensive teaching and professional experience including total joint replacements. Seeking academic, group or solo practice. Dr. Kohli, 5021 Aurora Avenue, Des Moines, Iowa 50310. Phone: (515) 276-3533.

LOCUM TENENS: For June, July and August. AAFP. North end Palm Beach County. Florida license necessary. Call 1(305)747-0279 evenings.

### Practices Available

PRACTICE AVAILABLE. Well established practice plus equipment in growing area of South Florida. M.D. leaving for personal reasons. Willing to sacrifice. Write Box 786, Boynton Beach, Florida 33435.

GENERAL AND VASCULAR SURGERY PRACTICE FOR SALE. Newly decorated. Fully equipped. In new building beside hospital in St. Petersburg. Retiring due to illness. For details call (813) 867-0531.

INTERNIST PRACTICE FOR SALE in Jacksonville. Equipment, office lease and patients' charts. For further information write C-929, P.O. Box 2411, Jacksonville 32203.

FORT LAUDERDALE INTERNIST TO SHARE well furnished office centrally located with M.D. willing to take over gradually. Office and practice rent reasonable. Write C-926, P.O. Box 2411, Jacksonville, Florida 32203.

CENTRAL FLORIDA FAMILY PRACTICE. Condo office in a medical-dental complex for sale by owner. 1,200 square feet — 4 examining rooms, etc. 95% collection rate. Good area. For details call (305) 647-6454 or (305) 830-0570 after five.

### Equipment

NEW AUTOMOBILES. Save up to $1,000 on all U.S. makes. Statewide delivery with full warranty. For quote send itemized needs to Aristocrat Auto Brokers, 11125 S.W. 74th Ave., Miami 33156.

FLORIDA LICENSED PHYSICIAN NEEDED immediately to take over active general practice in Broward County. Sale is for equipment only. Excellent gross. Write C-914, P.O. Box 2411, Jacksonville, Florida 32203.

### Real Estate

OUTSTANDING LOCATION FOR SPECIALIST: St. Nicholas Medical Center. Central location, off street parking and all utilities furnished (including janitor service). Contact W. G. Allen, Jr., Owner-Manager, St. Nicholas Medical Center, 3127 Atlantic Boulevard, Jacksonville 32207. Phone: (904) 398-5500.

LAKELAND, FLORIDA: FOR SALE, 6% down. Air-conditioned office for one to three physicians. Main street, 168 x 140 ft.; double parking lots; extra cottage. Dr. L. Polskin, Box 15966, Honolulu, Hawaii 96815.

FLORIDA — (SOUTHEAST) — DELRAY: Offices for lease in single story medical plaza adjacent to Interstate-95; busy intersection and newly built convalescent center; tremendous opportunity to grow with a rapidly growing middle class community of single-family

and condominium dwellings. Contact: Lawrence M. Landis, 900 S. Congress Ave., Delray, Florida 33445. Phone: (305) 278-0062.

JACKSONVILLE. 1,500 square feet, medically designed office available in newly refurbished Shops of Sherwood (northwest area of Jacksonville). A/C, ample parking. Located in stable, middle income residential community which needs medical doctor. Ideal for growing practice. Some equipment available. Start at $250 per month. Call collect (305) 446-4284.

MODULAR OFFICE. 1,440 SQ. FT. EASILY MOVABLE. Two waiting rooms, three examining rooms, three offices. Lab. area. Kitchen. Carpeted. Details (904) 726-8660.

TOP SOUTH FLORIDA LOCATION FOR SPECIALISTS: Coral Springs, which is one of the fastest growing communities in Florida, needs specialists. Coral Springs Medical Center has office space available in established medical complex. Excellent conditions. Lease or buy in. Contact Bruce McCully, 9441 West Sample Road, Coral Springs, Florida 33065. Phone: (305) 752-1600.

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FINE ART. Major paintings by modern and contemporary masters. DeKooning, Johns, Kelly, Lichtenstein, Louis, Oldenburg, Pollock, Rauschenberg, Twombly, Warhol and others. By appointment only. Marvin Ross Friedman & Co., 15451 Southwest 67 Court, Miami, Florida 33157. (305) 233-4281.

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Red Cross needs individual volunteers, and donors of blood and money, by the millions.

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If your business is already helping, by organizing blood drives, and by supporting payroll deductions—either directly for the Red Cross, or through the local combined fund drive—the whole community owes you thanks. And we thank you, too.

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Think of America without The American Red Cross.

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Florida Medical Association Annual Meeting, May 23-27, 1979

ROCHE

# For recurrent attacks of urinary tract infection in women

# Bactrim™ DS Double Strength Tablets

Each tablet contains 160 mg trimethoprim and 800 mg sulfamethoxazole.

## Just one tablet b.i.d. for 10 to 14 days

- Action at urinary/vaginal/lower bowel sites helps eliminate reservoirs of infecting organisms
- Distinctive antibacterial action plus wide spectrum helps eradicate recurrent UTI
- Low incidence of bacterial resistance in community practice
- Convenient *b.i.d.* dosage provides day-and-night antibacterial control
- Contraindicated during pregnancy and the nursing period. During therapy, maintain adequate fluid intake; perform CBC's and urinalyses with microscopic examination.

**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms:** *Escherichia coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris, Proteus morganii.* **It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination.** *Note:* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

**Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.**

The recommended quantitative disc susceptibility method (*Federal Register, 37*:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

**Contraindications:** Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers; infants less than two months of age.

**Warnings:** Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

**Precautions:** Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

**Adverse Reactions:** All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

**Dosage: Not recommended for infants less than two months of age.**

*Urinary Tract Infections:* Usual adult dosage—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

Recommended dosage for children—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. A guide follows:

*Children two months of age or older:*

| Weight | | Dose—every 12 hours | |
|---|---|---|---|
| lbs | kgs | Teaspoonfuls | Tablets |
| 20 | 9 | 1 teasp. (5 ml) | ½ tablet |
| 40 | 18 | 2 teasp. (10 ml) | 1 tablet |
| 60 | 27 | 3 teasp. (15 ml) | 1½ tablets |
| 80 | 36 | 4 teasp. (20 ml) | 2 tablets or 1 DS tablet |

For patients with renal impairment:

| Creatinine Clearance (ml/min) | Recommended Dosage Regimen |
|---|---|
| Above 30 | Usual standard regimen |
| 15-30 | ½ the usual regimen |
| Below 15 | Use not recommended |

*Pneumocystis carinii pneumonitis:* Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

**Supplied:** *Double Strength (DS) tablets,* each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. *Tablets,* each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10. *Oral suspension,* containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole, fruit-licorice flavored—bottles of 16 oz (1 pint).

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**Contraindications:** Patients with known hypersensitivity to the drug.

**Warnings:** Warn patients that mental and/or physical abilities required for tasks such as driving or operating machinery may be impaired, as may be mental alertness in children, and that concomitant use with alcohol or CNS depressants may have an additive effect. Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported.

***Usage in Pregnancy:*** **Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

**Precautions:** In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

**Adverse Reactions:** Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

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JUNE COVER — Richard S. Hodes, M.D., President of the Florida Medical Association.

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*See following page for a brief summary of prescribing information.*

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**Indications:** Symptomatic relief and/or prevention of asthma and reversible bronchospasm associated with chronic bronchitis and emphysema.

**Contraindications:** THEO-DUR is contraindicated in individuals who have shown hypersensitivity to any of its components or xanthine derivatives.

**Warnings:** Excessive theophylline doses may be associated with toxicity; serum theophylline levels should be monitored to assure maximum benefit with minimum risk. Incidence of toxicity increases at serum levels greater than 20 mcg/ml. High blood levels of theophylline resulting from conventional doses are correlated with clinical manifestations of toxicity in: patients with lowered body plasma clearances, patients with liver dysfunction or chronic obstructive lung disease, and patients who are older than 55 years of age, particularly males. There are often no early signs of less serious theophylline toxicity such as nausea and restlessness, which may appear in up to 50% of patients prior to onset of convulsions. Ventricular arrhythmias or seizures may be the first signs of toxicity.

Many patients who have higher theophylline serum levels exhibit a tachycardia. Theophylline products may worsen pre-existing arrhythmias.

**Usage in Pregnancy:** Safe use in pregnancy has not been established relative to possible adverse effects on fetal development, but neither have adverse effects on fetal development been established. This is, unfortunately, true for most anti-asthmatic medications. Therefore, use of theophylline in pregnant women should be balanced against the risk of uncontrolled asthma.

**Precautions:** THEO-DUR TABLETS SHOULD NOT BE CHEWED OR CRUSHED. Theophyllines should not be administered concurrently with other xanthine medications. It should be used with caution in patients with severe cardiac disease, severe hypoxemia, hypertension, hyperthyroidism, acute myocardial injury, cor pulmonale, congestive heart failure, liver disease and in the elderly, particularly males, and in neonates. Great caution should be used in giving theophylline to patients in congestive heart failure since these patients show markedly prolonged theophylline blood level curves. Use theophylline cautiously in patients with history of peptic ulcer. Theophylline may occasionally act as a local irritant to G.I. tract although gastrointestinal symptoms are more commonly central and associated with high serum concentrations above 20 mcg/ml.

**Adverse Reactions:** The most consistent adverse reactions are usually due to overdose and are:

Gastrointestinal: Nausea, vomiting, epigastric pain, hematemesis, diarrhea.

Central Nervous System: Headaches, irritability, restlessness, insomnia, reflex hyperexcitability, muscle twitching, clonic and tonic generalized convulsions.

Cardiovascular: Palpitation, tachycardia, extrasystoles, flushing, hypotension, circulatory failure, life threatening ventricular arrhythmias.

Respiratory: Tachypnea.

Renal: Albuminuria, increased excretion of renal tubular cells and red blood cells; potentiation of diuresis.

Others: Hyperglycemia and inappropriate ADH syndrome.

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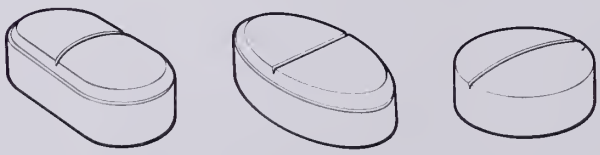

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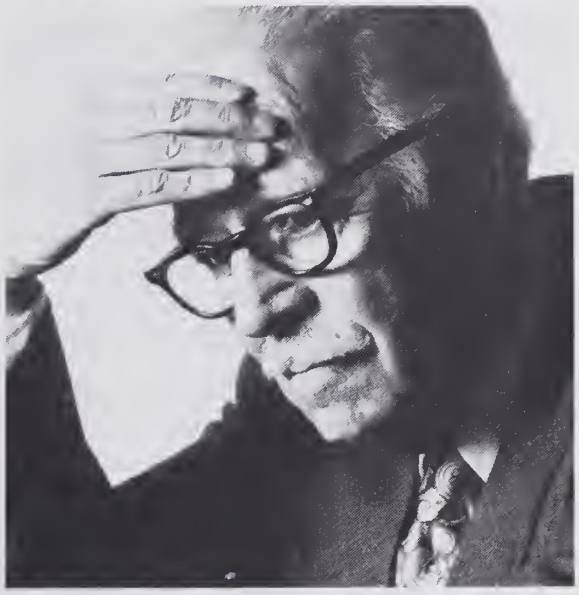

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**THERAPEUTIC FOOTNOTE:** IN TREATING ANGINA . . . FAILURES MAY RESULT FROM INADEQUATE DOSAGE
Reports in the literature indicate the usefulness of higher dosage levels of isosorbide dinitrate.[1,2]

**INDICATIONS:** Based on a review of this drug by the National Academy of Sciences — National Research Council and/or other information, FDA has classified the indications as follows:

**"Possibly" effective:** For the relief of angina pectoris (pain of coronary artery disease). ISO-BID is not intended to abort the acute anginal episode, but is widely regarded as useful in the prophylactic treatment of angina pectoris. Final classification of the less-than-effective indication requires further investigation.

**CONTRAINDICATION:** Idiosyncrasy to this drug.

**WARNINGS:** Data supporting the use of nitrites during the early days of the acute phase of myocardial infarction (the period during which clinical and laboratory findings are unstable) are insufficient to establish safety.

**PRECAUTIONS:** Use with caution in patients with glaucoma. Tolerance to this drug, and cross-tolerance to other nitrates and nitrites may occur.

**ADVERSE REACTIONS:** Cutaneous vasodilation with flushing. Headache may commonly occur, and may be both severe and persistent. Transient dizziness and weakness, in addition to other signs of cerebral ischemia associated with postural hypotension may occasionally be seen. ISO-BID can act as a physiological antagonist to norepinephrine, histamine, acetylcholine and many other medications. An occasional patient may show marked sensitivity to the hypotensive effects of nitrite; severe responses (nausea, vomiting, weakness, restlessness, pallor, excessive sweating and collapse) can occur, even with the usual therapeutic dosage; alcohol may enhance this effect. A drug rash and/or exfoliative dermatitis is occasionally seen.

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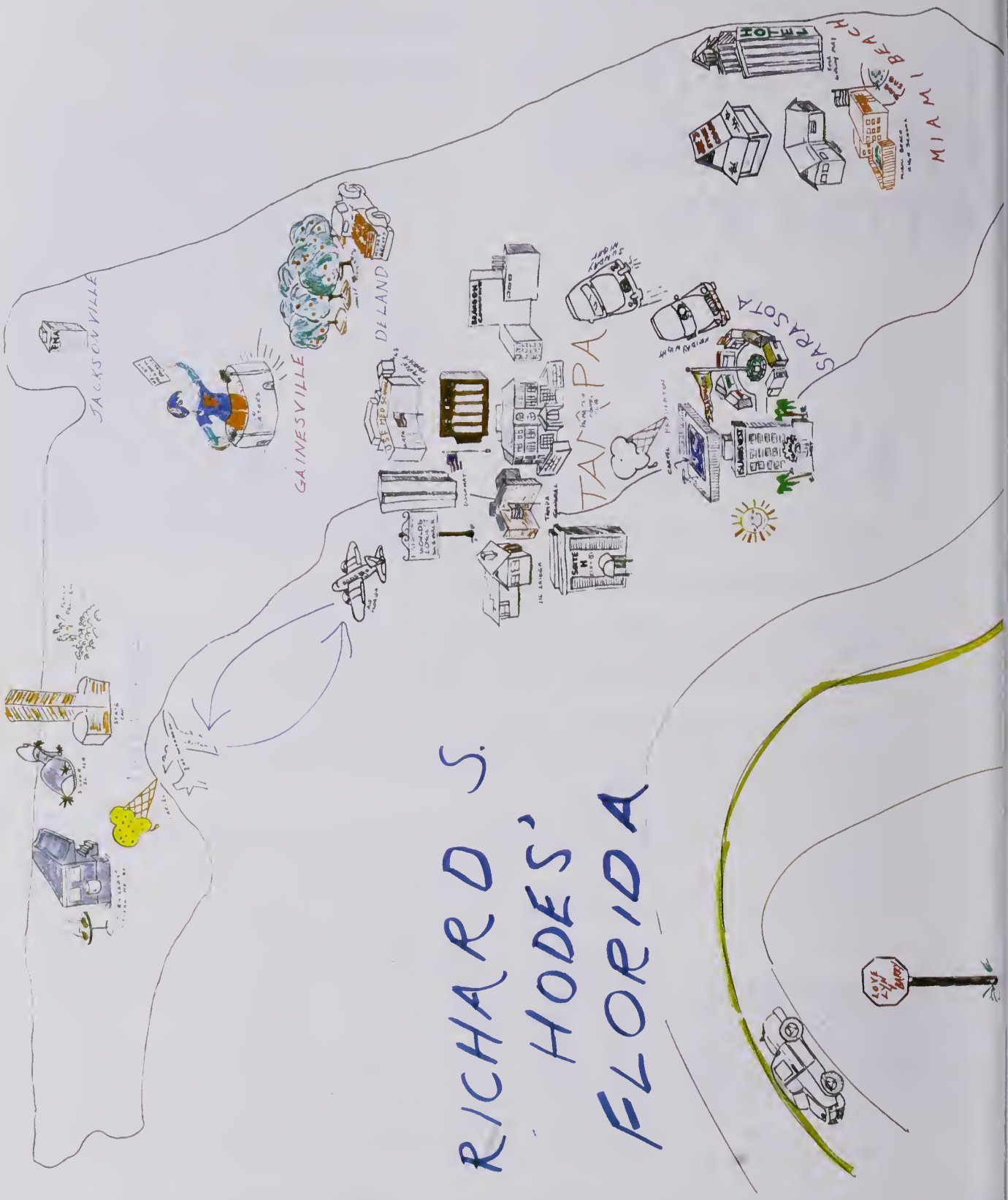
1. Shane, S.J.: Canadian Family Physician, November 1973. 2. Lemberg, L.: Practical Cardiology, February 1976.




This drawing was a birthday gift to Dr. Richard Hodes from his daughter, Mrs. Marilyn (Lyn) Meyerson, of Tampa. It hangs in his office in the Capitol Building in Tallahassee.

# President's Page

## Power and Tenure

Approaches to the governance of an organization relate to the power of the leadership and its tenure of office. The FMA with its officers, Board of Governors and House of Delegates combine all varieties of the relationship between tenure and power.

The governing and policy-making body is the House of Delegates where generally tenure is long but power is diffused among a large membership. The management decisions are made by a board with some continuity and more concentrated power. The President, whose appointive and recommending power is great, enjoys only the short tenure of one year and this is appropriate.

The fresh look and new concepts that an annual reappraisal by a new president offers keeps an organization dynamic and alive.

As a new president, I observe that certain issues have emerged which demand specific responses. First, an assessment of operating expenditures in the face of an inflating economy makes it clear that cost reductions will have to be made.

I have recommended to the Board of Governors some revisions to the FMA committee structure. A number of committees in recent years have been created which report directly to the Board. Normally our organization has councils which supervise individual committees serving to reduce the span of control of the Board. Committees reporting to the Board must travel to Board meetings to report. Additionally office staff must be diluted in the amount of staff time available in order to service Board committees. To cure this problem, I have recommended that all but two committees be placed under councils.

In addition there has been a realignment and renaming of councils in order that the committees within councils more nearly relate to each other programatically.

Another and perhaps more controversial decision has been to sharply reduce the size of most committees. The effect of this is to reduce travel costs and to some extent expedite committee decision-making. Unfortunately, the result is that some outstanding committee members could not be retained. This is regrettable but necessary and in no way reflects an individual interest or performance. In many instances committees have been reduced to just a chairman when the activities of that committee do not involve policy questions.

Consistent with these decisions there has also been some reduction in the state office staff. This last action will mean that the workload of the staff will be increased. The increased workload of FMA staffers is going to require that FMA members cooperate with requests for information or responses from the county and state society offices in a timely manner.

The measures I have outlined above do not reflect any impending money crises in the FMA. It's only that a review of trends indicates a clear need to act now to prevent a fiscal crisis. I hope that these actions will be understood by the entire membership. Prudence dictates a sound management approach in FMA operations. Our Executive Vice President, Dr. Harold Parham, has maintained sound management, but recent trends required the indicated changes.

I personally wish to thank all those excellent members who have indicated a willingness to serve the FMA in committee work and express a special appreciation to those who have served so well in the past but who may not now be reappointed to revised committees.

Richard Hodes

Oral formulation eliminates the need for sublingual tablets

# ORAL HYDERGINE®

TABLETS, 1 mg

Each 1 mg Hydergine tablet contains dihydroergocornine mesylate 0.333 mg, dihydroergocristine mesylate 0.333 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.333 mg, representing a total of 1 mg

## an improvement that's easy to swallow

- no waiting for tablets to dissolve under the tongue
- easier dose administration for increased patient compliance—less need for supervision
- human bioavailability demonstrated

## for many elderly patients with selected symptoms such as...

- confusion
- mood-depression
- dizziness

**Contraindications:** Hypersensitivity to the drug

**Precautions:** *Because the target symptoms are of unknown etiology, careful diagnosis should be attempted before prescribing Hydergine tablets and sublingual tablets*

**Adverse Reactions:** Serious side effects have not been found. Some sublingual irritation, transient nausea, and gastric disturbances have been reported. Hydergine tablets and sublingual tablets do not possess the vasoconstrictor properties of natural ergot alkaloids

**Dosage and Administration:** 1 mg three times daily. Alleviation of symptoms is usually gradual and results may not be observed for 3-4 weeks.

**How Supplied: Hydergine tablets (for oral use) 1 mg,** packages of 100 and 500. **Hydergine sublingual tablets 1 mg,** containing dihydroergocornine mesylate 0.333 mg, dihydroergocristine mesylate 0.333 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.333 mg, representing a total of 1 mg, packages of 100, 500, and 1000. **Hydergine sublingual tablets 0.5 mg,** containing dihydroergocornine mesylate 0.167 mg, dihydroergocristine mesylate 0.167 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.167 mg, representing a total of 0.5 mg, packages of 100 and 1000

*Before prescribing, see package insert for full product information.*

**SPECIFY "ORAL" HYDERGINE® TABLETS, 1 mg**

(1 tab. t.i.d.)

SANDOZ PHARMACEUTICALS, EAST HANOVER, N.J. 07936

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The inexpensive, in-office culture tests for *Trichomonas vaginalis,* Candida (Monilia), *N. gonorrhoeae*

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There's an 'Isocult' culture test for Bacteriuria too. It's reliable, rapid, inexpensive and easy to interpret (results are available within 18 to 24 hours).

*'Isocult' is available through local distributors, nationwide.* To order or for more information call toll free: (800) 538-1581. (In California call the number below, collect.)

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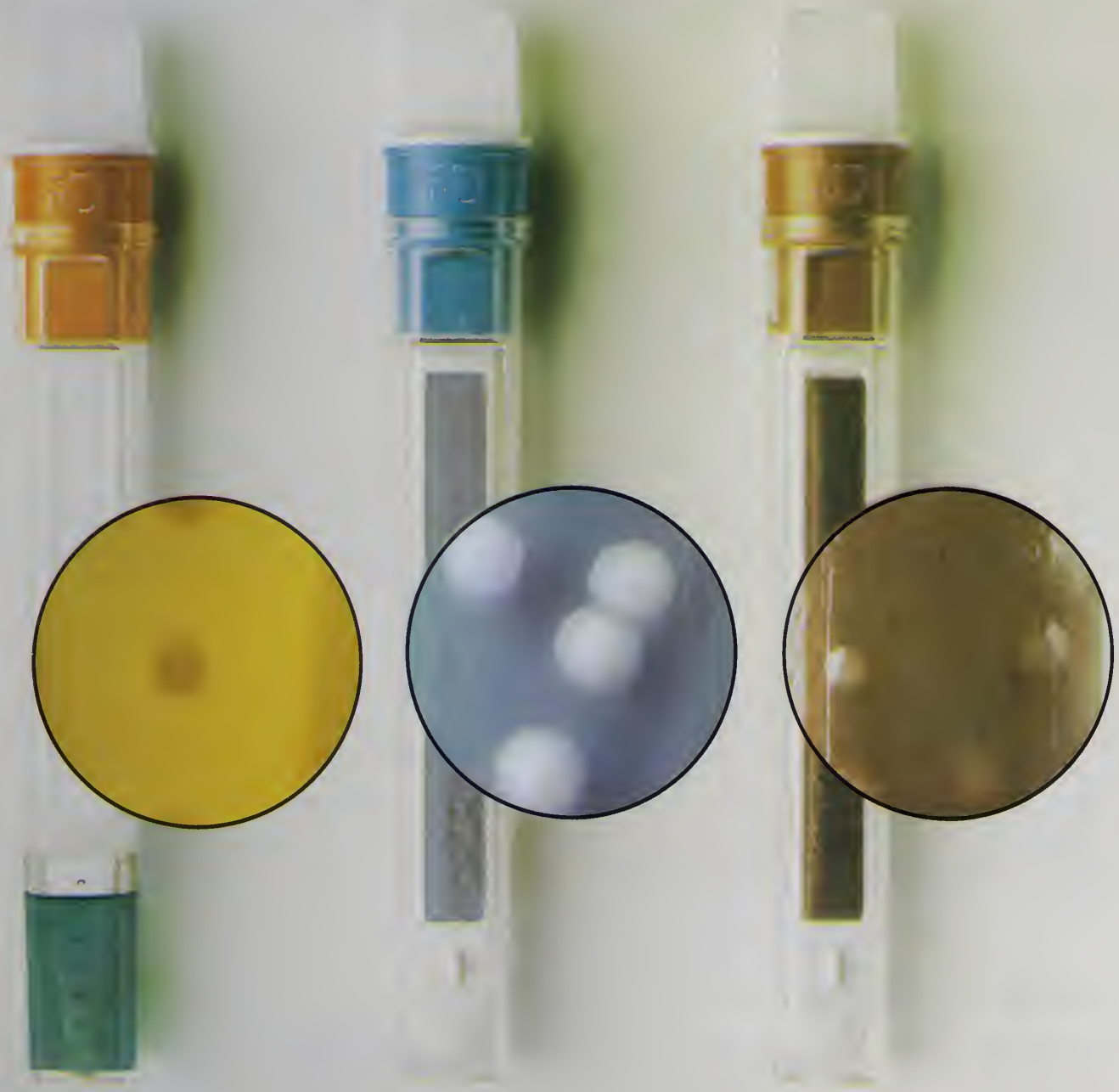

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# FROM THE EDITOR'S DESK

## NATIONAL HEALTH INSURANCE

Inflation apparently is toning down the dreams of liberal proponents of National Health Insurance. The Committee for National Health Insurance--led by organized labor and Senator Edward Kennedy--said its new NHI bill pursues objectives "with a minimum of government interference . . . relying on the private sector to the greatest degree possible." A CNHI policy paper acknowledged that "the political philosophy of the United States has turned to confining the role of the Federal Government." The inflation-conscious Congress is showing more and more interest in keeping NHI simple.

## VOLUNTARY EFFORT

A hospital cost containment checklist has been sent to every hospital chief of staff in the country as part of the Voluntary Effort to hold cost increases to 11.6% this year. Prepared by the AMA, the checklist outlines specific ways chiefs of staff can (1) provide professional participation in cost containment programs; (2) encourage physicians to make their practices more cost-effective; and (3) make changes in medical staff activities to assure more efficient use of hospital personnel, supplies and equipment.

## HEALTH PLANNING ACT

AMA has called for repeal of the Health Planning Act. In a statement to the House Commerce Subcommittee on Health, AMA said Public Law 93-641 places insufficient authority at the local level and is not flexible enough to meet the needs of individual patients and insure the availability of high quality care. One amendment in the bill (HR-3041) would extend certificate-of-need requirements to equipment purchased for physicians' offices and determined to be used for hospital inpatients.

## OHIO BLUE SHIELD

Ownership of Ohio's largest Blue Shield plan is being transferred to its 3.5 million subscribers as a result of settlement of an anti-trust suit brought against the Ohio State Medical Association by the Ohio Attorney General's Office. The suit, filed in 1975, claimed that the Association's ownership of Ohio Medical Indemnity restricted competition in physicians' fees. OMI will purchase its stock from the Association for $56,000--the same amount paid by the Association 33 years ago--and OSMA no longer will have a role in selecting the company's directors.

## HOUSESTAFF BARGAINING

Housestaff physicians may organize formally and engage in collective bargaining

under a decision handed down by the U.S. Court of Appeals in Washington, D.C. The ruling implied that the National Labor Relations Board was wrong when it held three years ago that interns and residents are students, not employees, and are therefore not entitled to form federally-protected unions. The appellate court said certification of housestaff collective bargaining units would "largely eliminate" strikes over union recognition and "could lead to orderly collective bargaining." The NLRB may appeal to the U.S. Supreme Court.

## DISQUALIFICATION

The AMA has called for Federal Trade Commission Chairman Michael Pertschuk to withdraw from further participation in the FTC's challenge to the AMA position of physical advertising. In a motion filed with the FTC, the AMA contended it is obvious that the Chairman "has prejudged the case against the AMA, and has already decided that the commission's actions against AMA would keep health care costs down, raise quality and broaden consumer choice."

## CLINICAL LABORATORY ACT

The AMA has charged that the federal government is trying to evade its responsibilities to Medicare beneficiaries through a proposed redefinition of "physicians' services." The Clinical Laboratory Improvement Act would amend the Medicare law definition to exclude services the physician performs as an educator, executive or researcher. AMA told the Senate Labor and Human Resources Committee that the definition would "enable government personnel to preempt medical judgements in the determination of what is a professional service under the Medicare Law."

## VIOLATIONS

Under a law that went into effect in July, 1978, ophthalmologists and optometrists are required to furnish each patient with a copy of his eyeglasses prescription. The Federal Trade Commission says it has received more than 100 complaints of violation, mostly from patients and a few from opticians.

## TOBACCO SUPPORTS

The U.S. Department of Agriculture claims that government price supports for tobacco do not contribute to the product's use. In a letter to the American Medical Association, USDA seemed to say that price supports result in less tobacco being produced, keeping prices high; and that in the absence of supports, prices and production would fall, requiring more imports and boosting the U.S. trade deficit.

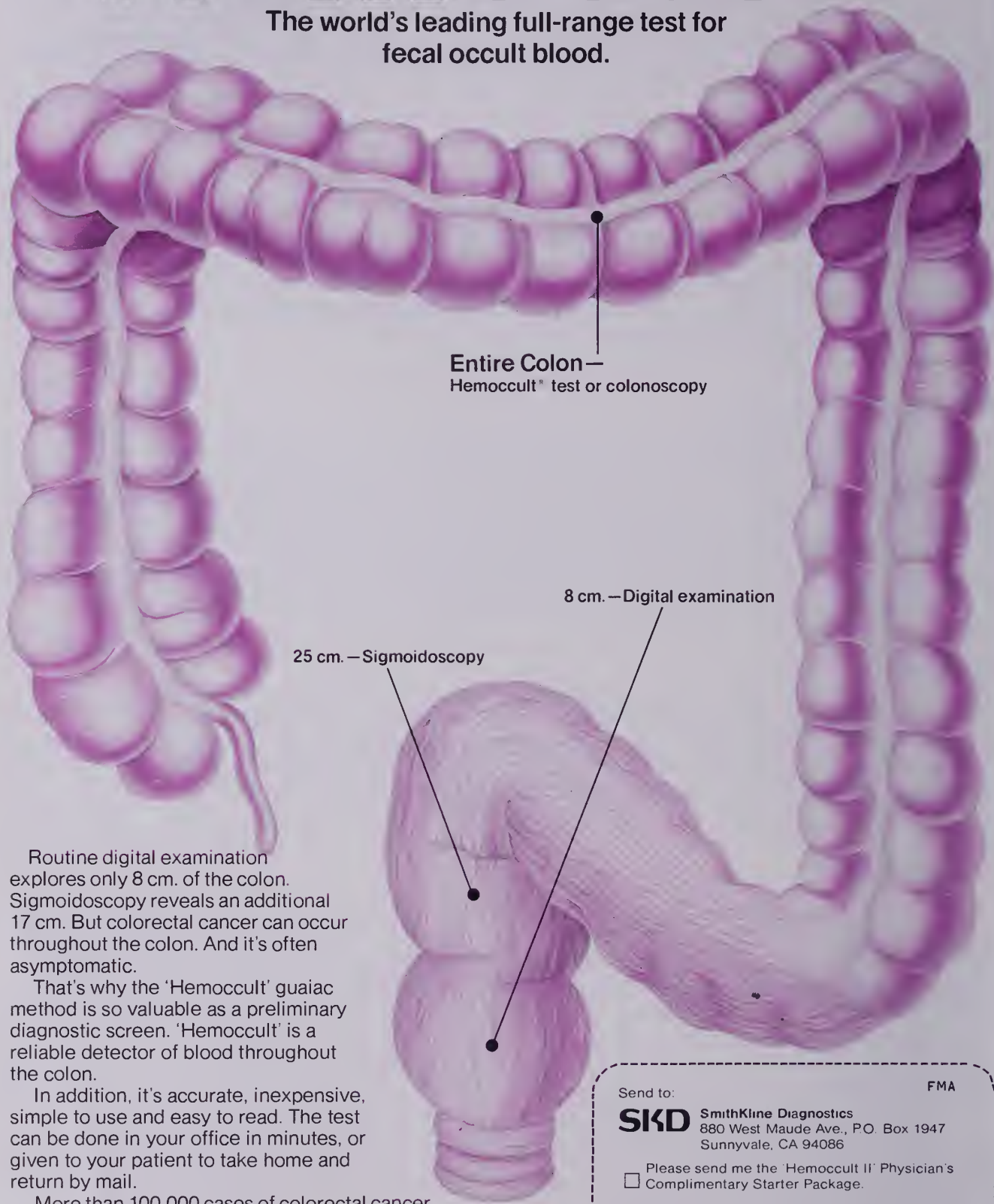
## THEME MEETINGS

The American Medical Association will begin in 1980 to sponsor a series of scientific "Theme Meetings." The first one, on cardiovascular disease, will be in Los Angeles, April 10-13, 1980. The AMA program lineup for 1980 also will include 13 regional scientific meetings.

The Editor

# Hemoccult®

**The world's leading full-range test for fecal occult blood.**




Routine digital examination explores only 8 cm. of the colon. Sigmoidoscopy reveals an additional 17 cm. But colorectal cancer can occur throughout the colon. And it's often asymptomatic.

That's why the 'Hemoccult' guaiac method is so valuable as a preliminary diagnostic screen. 'Hemoccult' is a reliable detector of blood throughout the colon.

In addition, it's accurate, inexpensive, simple to use and easy to read. The test can be done in your office in minutes, or given to your patient to take home and return by mail.

More than 100,000 cases of colorectal cancer will occur in the United States this year. The earlier they are diagnosed, the greater the chances for successful treatment. Send for your free 'Hemoccult' starter package, today.

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FMA

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# Dean's Page

# Goose or the Gander?

William B. Deal, M.D.

In the late 1960's and early 1970's the public was discussing, in a variety of forms: (1) scarcity of health manpower, (2) a concern about increasing dependence of foreign medical graduates, (3) increasing demand for health care and (4) unhappiness about the delivery system.

Resulting from these public concerns, the number of medical school first-year positions increased dramatically, in large measure due to Federal incentives. Physician assistant programs multiplied. Schools of nursing developed the nurse practitioners. Slowly, year by year, the academic pipeline was filled. Suddenly, three years after the first forecast of a surplus was made, the Federal government withdrew, in part, currently appropriated support.

Next, the Federal government invoked strict regulations on who could and could not enter the U.S. to practice medicine.

Stringent guidelines were also imposed on the health care providers regarding who was eligible for Federal programs. The access to health care was broadened without regard to the real accessibility that existed prior to the late 1960's. Furthermore, the providers became burdened to the breaking point with regulations and the expense necessary to comply with those regulations increased health care costs.

In an attempt to alter the delivery system, health maintenance organizations, physician extenders, storefront clinics, surgicenters, and home health services flourished. These "new" services received Federal approval and funding. Surely, as fall follows summer, these services became highly regulated. Health systems agencies were established and funded in an attempt to control the growth of services that the Federal government encouraged earlier. Regulations and Medicare audits have become household words. Costs increased.

A decade later, in another arena, we find ourselves as spectators instead of the players. This arena is called "energy." The public is now concerned about (1) scarcity of fossil fuels, (2) increasing dependence on foreign crude oil, (3) increasing demand for energy and (4) the traditional delivery system. What is the Federal solution? Deregulation.

What's good for the goose is good for the gander!

Dr. Deal is Vice President for Health Affairs and Dean, University of Florida College of Medicine, Gainesville.

• Dr. Deal, University of Florida College of Medicine, Gainesville 32610.

The opinions stated on this page are those of the individual Dean's and do not necessarily represent the policy of the FMA

# V-Cillin K®

## penicillin V potassium

## is the most widely prescribed brand of oral penicillin

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Oral Solution
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**V-Cillin K®**
**penicillin V potassium**

**Description:** V-Cillin K is the potassium salt of penicillin V. This chemically improved form combines acid stability with immediate solubility and rapid absorption.

**Indications:** For the treatment of mild to moderately severe pneumococcal respiratory tract infections and mild staphylococcal skin and soft-tissue infections that are sensitive to penicillin G. See the package literature for other indications.

**Contraindication:** Previous hypersensitivity to penicillin.

**Warnings:** Serious, occasionally fatal, anaphylactoid reactions have been reported. Some patients with penicillin hypersensitivity have had severe reactions to a cephalosporin; inquire about penicillin, cephalosporin, or other allergies before treatment. If an allergic reaction occurs, discontinue the drug and treat with the usual agents (e.g., epinephrine or other pressor amines, antihistamines, or corticosteroids).

**Precautions:** Use with caution in individuals with histories of significant allergies and/or asthma. Do not rely on oral administration in patients with severe illness, nausea, vomiting, gastric dilatation, cardiospasm, or intestinal hypermotility. Occasional patients will not absorb therapeutic amounts given orally. In streptococcal infections, treat until the organism is eliminated (minimum of ten days). With prolonged use, nonsusceptible organisms, including fungi, may overgrow; treat superinfection appropriately.

**Adverse Reactions:** Hypersensitivity, including fatal anaphylaxis. Nausea, vomiting, epigastric distress, diarrhea, and black, hairy tongue. Skin eruptions, urticaria, reactions resembling serum sickness (including chills, edema, arthralgia, prostration), laryngeal edema, fever, and eosinophilia. Infrequent hemolytic anemia, leukopenia, thrombocytopenia, neuropathy, and nephropathy, usually with high doses of parenteral penicillin. (102175)

***Equivalent to penicillin V.**

*Additional information available to the profession on request.*

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# NEOSPORIN® Ointment

## (Polymyxin B-Bacitracin-Neomycin)

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Each gram contains: Aerosporin® (Polymyxin B Sulfate) 5,000 units, bacitracin zinc 400 units, neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin ase), special white petrolatum qs; in tubes of 1 oz nd 1/2 oz and 1/32 oz (approx.) foil packets.

**NDICATIONS:** *Therapeutically,* (as an adjunct to sysemic therapy when indicated), for topical infections, rimary or secondary, due to susceptible organisms, as : infected burns, skin grafts, surgical incisions, otitis xterna; primary pyodermas (impetigo, ecthyma, ycosis vulgaris, paronychia); secondarily infected ermatoses (eczema, herpes, and seborrheic dermatis); traumatic lesions, inflamed or suppurating as a esult of bacterial infection. *Prophylactically,* the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

**CONTRAINDICATIONS:** This product is contraindicated in those individuals who have shown hypersensitivity to any of its components. Do not use in the eyes or in the external ear canal if the eardrum is perforated.

**WARNING:** Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.

**PRECAUTIONS:** As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

**ADVERSE REACTIONS:** Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.

# ready to do more
# able to do more...

# with symptomatic relief of moderate anxiety with depression

**Rapid relief of the symptoms of moderate anxiety in many patients**

The tranquilizer component alleviates symptoms of anxiety and agitation within a few days, without apparent dulling of mental acuity. Hypnotic effects from the tranquilizer component appear to be minimal, particularly in patients permitted to remain active. However, TRIAVIL may impair mental and/or physical abilities required for the performance of hazardous tasks.

**Highly effective antidepressant action**

The antidepressant component relieves symptoms of depression such as poor concentration and feelings of hopelessness as well as early morning awakening; adequate relief of symptoms may take a few weeks or even longer.

**Increased activity potential often results from symptomatic relief**

As the symptoms of anxiety and depression respond to TRIAVIL, many patients may show renewed interest in family and recreational activities and are able to function more effectively at work.

**More prescribing convenience**

For optimal flexibility there are now *five* tablet strengths of TRIAVIL for ease of dosage adjustment. For initial management of patients with moderate anxiety and depression, one TRIAVIL® 2-25, containing 2 mg perphenazine and 25 mg amitriptyline HCl, t.i.d. may often be adequate. TRIAVIL® 4-50, containing 4 mg perphenazine and 50 mg amitriptyline HCl, provides b.i.d. convenience for those patients needing the larger total daily dose of 8 mg perphenazine and 100 mg amitriptyline HCl as initial or maintenance therapy.

**Treatment with TRIAVIL—a balanced view:**

TRIAVIL is contraindicated in CNS depression from drugs, in the presence of evidence of bone marrow depression, and in patients hypersensitive to phenothiazines or amitriptyline. It should not be used during the acute recovery phase following myocardial infarction or in patients who have received an MAOI within two weeks. Patients with cardiovascular disorders should be watched closely. Not recommended in children or during pregnancy. TRIAVIL may impair mental and/or physical abilities required for performance of hazardous tasks and may enhance the response to alcohol. Antiemetic effect may obscure toxicity due to overdosage of other drugs or mask other disorders. The possibility of suicide in depressed patients remains until significant remission occurs. Such patients should not have access to large quantities of the drug. Hospitalize as soon as possible any patient suspected of having taken an overdose.

For moderate anxiety with depression

dual-action Triavil®

containing perphenazine and amitriptyline HCl

MSD
MERCK SHARP & DOHME

*Please see following page for a brief summary of prescribing information.*

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## More dosage strengths than any other formulation containing a tranquilizer and an antidepressant

# dual-action Triavil®

## containing perphenazine and amitriptyline HCl

**Available:**
TRIAVIL® 2-25: Each tablet contains
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TRIAVIL® 4-50: Each tablet contains
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TRIAVIL® 4-25: Each tablet contains
4 mg perphenazine and 25 mg amitriptyline HCl.
TRIAVIL® 4-10: Each tablet contains
4 mg perphenazine and 10 mg amitriptyline HCl.

**CONTRAINDICATIONS:** Central nervous system depression from drugs (barbiturates, alcohol, narcotics, analgesics, antihistamines); evidence of bone marrow depression; known hypersensitivity to phenothiazines or amitriptyline. Should not be given concomitantly with a monoamine oxidase inhibitor since hyperpyretic crises, severe convulsions, and deaths have occurred from such combinations. When used to replace a monoamine oxidase inhibitor, allow a minimum of 14 days to elapse before initiating therapy with TRIAVIL. Therapy should then be initiated cautiously with gradual increase in dosage until optimum response is achieved. Not recommended for use during acute recovery phase following myocardial infarction.

**WARNINGS:** TRIAVIL should not be given concomitantly with guanethidine or similarly acting compounds since TRIAVIL may block the antihypertensive action of such compounds. Use cautiously in patients with history of urinary retention, angle-closure glaucoma, increased intraocular pressure, or convulsive disorders. Dosage of anticonvulsive agents may have to be increased. In patients with angle-closure glaucoma, even average doses may precipitate an attack. Patients with cardiovascular disorders should be watched closely. Tricyclic antidepressants, including amitriptyline HCl, have been reported to produce arrhythmias, sinus tachycardia, and prolongation of conduction time, particularly in high doses. Myocardial infarction and stroke have been reported with tricyclic antidepressant drugs. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. May impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle. In patients who use alcohol excessively, potentiation may increase the danger inherent in any suicide attempt or overdosage. Not recommended in children or during pregnancy.

**PRECAUTIONS:** Suicide is a possibility in depressed patients and may remain until significant remission occurs. Such patients should not have access to large quantities of this drug.

**Perphenazine:** Should not be used indiscriminately. Use with caution in patients who have previously exhibited severe adverse reactions to other phenothiazines. Likelihood of some untoward actions is greater with high doses. Closely supervise with any dosage. The antiemetic effect of perphenazine may obscure signs of toxicity due to overdosage of other drugs or make more difficult the diagnosis of disorders such as brain tumor or intestinal obstruction. A significant, not otherwise explained, rise in body temperature may suggest individual intolerance to perphenazine, in which case discontinue.

If hypotension develops, epinephrine should not be employed, as its action is blocked and partially reversed by perphenazine. Phenothiazines may potentiate the action of central nervous system depressants (opiates, analgesics, antihistamines, barbiturates, alcohol) and atropine. In concurrent therapy with any of these, TRIAVIL should be given in reduced dosage. May also potentiate the action of heat and phosphorous insecticides. There is sufficient experimental evidence to conclude that chronic administration of antipsychotic drugs which increase prolactin secretion has the potential to induce mammary neoplasms in rodents under the appropriate conditions. There are recognized differences in the physiological role of prolactin between rodents and humans. Since there are, at present, no adequate epidemiological studies, the relevance to human mammary cancer risk from prolonged exposure to perphenazine and other antipsychotic drugs is not known.

**Amitriptyline:** In manic-depressive psychosis, depressed patients may experience a shift toward the manic phase if they are treated with an antidepressant. Patients with paranoid symptomatology may have an exaggeration of such symptoms. The tranquilizing effect of TRIAVIL seems to reduce the likelihood of this effect. When amitriptyline HCl is given with anticholinergic agents or sympathomimetic drugs, including epinephrine combined with local anesthetics, close supervision and careful adjustment of dosages are required. Paralytic ileus may occur in patients taking tricyclic antidepressants in combination with anticholinergic-type drugs.

Caution is advised if patients receive large doses of ethchlorvynol concurrently. Transient delirium has been reported in patients who were treated with 1 g of ethchlorvynol and 75-150 mg of amitriptyline HCl.

Amitriptyline HCl may enhance the response to alcohol and the effects of barbiturates and other CNS depressants.

Concurrent administration of amitriptyline HCl and electroshock therapy may increase the hazards associated with such therapy. Such treatment should be limited to patients for whom it is essential. Discontinue several days before elective surgery if possible. Elevation and lowering of blood sugar levels have both been reported. Use with caution in patients with impaired liver function.

**ADVERSE REACTIONS:** Similar to those reported with either constituent alone.
**Perphenazine:** Extrapyramidal symptoms (opisthotonus, oculogyric crisis, hyperreflexia, dystonia, akathisia, acute dyskinesia, ataxia, parkinsonism) have been reported and can usually be controlled by the concomitant use of effective antiparkinsonian drugs and/or by reduction in dosage, but sometimes persist after discontinuation of the phenothiazine.

Tardive dyskinesia may appear in some patients on long-term therapy or may occur after drug therapy with phenothiazines and related agents has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. Symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth, or jaw. Involuntary movements of the extremities sometimes occur. There is no known treatment for tardive dyskinesia; antiparkinsonism agents usually do not alleviate the symptoms. It is advised that antipsychotic agents be discontinued if the above symptoms appear. If treatment is reinstituted, or dosage of the particular drug increased, or another drug substituted, the syndrome may be masked. Fine vermicular movements of the tongue may be an early sign of the syndrome. The full-blown syndrome may not develop if medication is stopped when lingual vermiculation appears.

Other side effects are skin disorders (photosensitivity, itching, erythema, urticaria, eczema, up to exfoliative dermatitis); other allergic reactions (asthma, laryngeal edema, angioneurotic edema, anaphylactoid reactions); peripheral edema; reversed epinephrine effect; hyperglycemia; endocrine disturbances (lactation, galactorrhea, gynecomastia, disturbances of menstrual cycle); altered cerebrospinal fluid proteins; paradoxical excitement; hypertension, hypotension, tachycardia, and ECG abnormalities (quinidine-like effect); reactivation of psychotic processes; catatonic-like states; autonomic reactions, such as dry mouth or salivation, headache, anorexia, nausea, vomiting, constipation, obstipation, urinary frequency or incontinence, blurred vision, nasal congestion, and a change in pulse rate; other adverse reactions reported with various phenothiazine compounds, but not with perphenazine, include grand mal convulsions, cerebral edema, polyphagia, pigmentary retinopathy, photophobia, skin pigmentation, and failure of ejaculation.

The phenothiazine compounds have produced blood dyscrasias (pancytopenia, thrombocytopenic purpura, leukopenia, agranulocytosis, eosinophilia) and liver damage (jaundice, biliary stasis).

Pigmentation of the cornea and lens has been reported to occur after long-term administration of some phenothiazines. Although it has not been reported in patients receiving TRIAVIL, the possibility that it might occur should be considered.

Hypnotic effects, lassitude, muscle weakness, and mild insomnia have also been reported.

**Amitriptyline:** Note: Listing includes a few reactions not reported for this drug, but which have occurred with other pharmacologically similar tricyclic antidepressant drugs and must be considered when amitriptyline is administered. *Cardiovascular:* Hypotension; hypertension; tachycardia; palpitation; myocardial infarction; arrhythmias; heart block; stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesia of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus; syndrome of inappropriate ADH (antidiuretic hormone) secretion. *Anticholinergic:* Dry mouth; blurred vision; disturbance of accommodation; increased intraocular pressure; constipation; paralytic ileus; urinary retention; dilatation of urinary tract. *Allergic:* Skin rash; urticaria; photosensitization; edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis; leukopenia; eosinophilia; purpura; thrombocytopenia. *Gastrointestinal:* Nausea; epigastric distress; vomiting; anorexia; stomatitis; peculiar taste; diarrhea; parotid swelling; black tongue. Rarely hepatitis (including altered liver function and jaundice). *Endocrine:* Testicular swelling and gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido; elevated or lowered blood sugar levels. *Other:* Dizziness; weakness; fatigue; headache; weight gain or loss; increased perspiration; urinary frequency; mydriasis; drowsiness; alopecia. *Withdrawal Symptoms:* Abrupt cessation after prolonged administration may produce nausea, headache, and malaise. These are not indicative of addiction.

**OVERDOSAGE:** All patients suspected of having taken an overdosage should be admitted to a hospital as soon as possible. Treatment is symptomatic and supportive. However, the intravenous administration of 1–3 mg of physostigmine salicylate is reported to reverse the symptoms of tricyclic antidepressant poisoning. Because physostigmine is rapidly metabolized, the dosage of physostigmine should be repeated as required particularly if life-threatening signs such as arrhythmias, convulsions, and deep coma recur or persist after the initial dosage of physostigmine. On this basis, in severe overdosage with perphenazine-amitriptyline combinations, symptomatic treatment of central anticholinergic effects with physostigmine salicylate should be considered.

J8TR31 (DC661321

*For more detailed information, consult your MSD Representative or see full Prescribing Information. Merck Sharp & Dohme, Division of Merck & Co., INC., West Point, Pa. 19486.*

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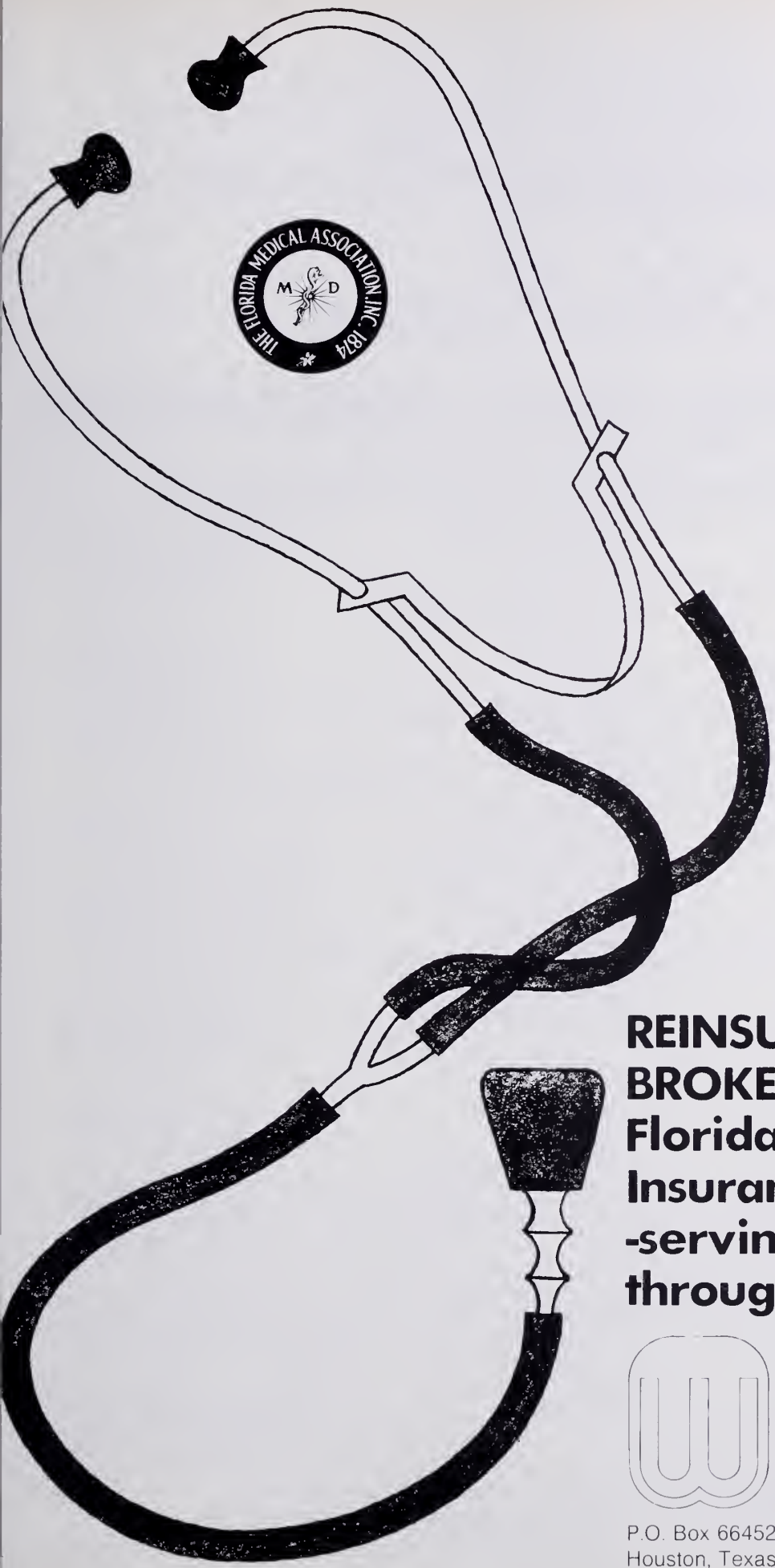


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**Abstract: This case is presented as an unusual result of trauma to the great toe. Intra-articular dislocation of a supernumerary sesamoid bone affixed to the flexor hallucis longus and dislocated in the interphalangeal joint of the great toe appears to be a rarity. Sweterlitsch et al reporting in the July 1965 issue of the Journal of Bone and Joint Surgery described two cases of entrapment of a sesamoid bone in the index metacarpophalangeal joint. Their review of the literature, however, as well as ours has failed to reveal such a dislocation of the toe.**

# Intra-Articular Accessory Sesamoid Dislocation of the Great Toe

## Report of Case

**James C. Barnett, M.D., Artagnan Crespo, M.D.
and Virgil C. Daniels, M.D.**

A 24-year-old man fell from a ladder striking his left great toe on one of the steps. It became hyperextended, swollen and painful. He was examined in the emergency room of a local hospital, x-rays were made (Figs. 1A, B), and three days later he was referred to an orthopedist.

At examination the left great toe was ecchymotic and swollen, and the patient stated he could not move the interphalangeal joint. Passive movement was accomplished with minimal discomfort. X-rays showed an accessory sesamoid bone dislocated into the joint together with a small chip fracture. X-ray of the right great toe revealed a similar accessory bone with no dislocation.

An attempt was made to reduce the intra-articular dislocation by holding the toe at the base and manipulating the distal phalanx in extension. Efforts were unsuccessful to reproduce what was thought to be the mechanism of injury. Repeat x-rays failed to reveal correction of the intra-articular dislocation and open reduction was advised.

### Operative Procedure

After the left foot had been prepared and draped in the usual manner, Xylocaine 1% was infiltrated at the base of the toe. The toe was exsanguinated by manual

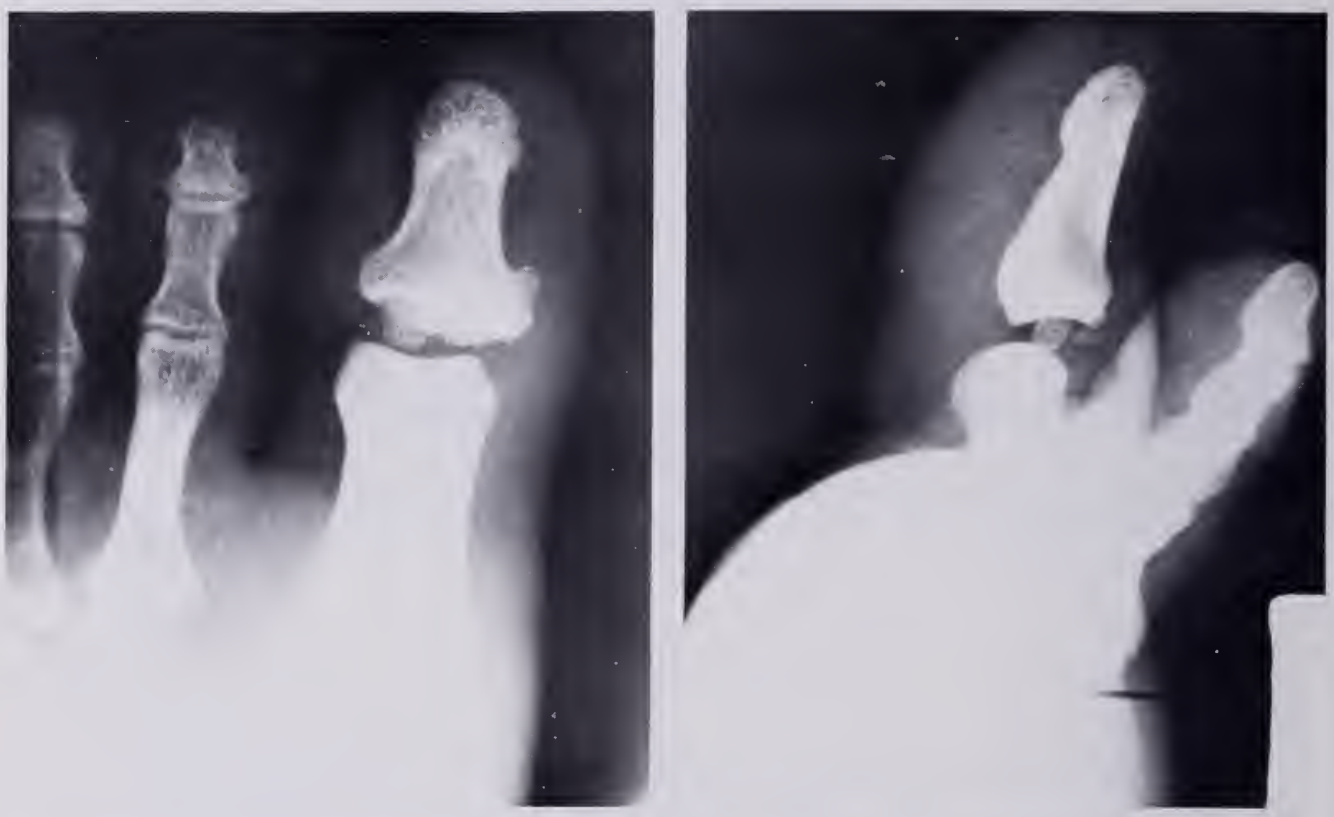

Fig. 1. — A. Radiographic dorso-plantar view showing intra-articular position of sesamoid bone. B. Radiographic lateral view showing chip fracture and intra-articular position of sesamoid bone.

Fig. 2. — A. Postoperative x-ray, dorso-plantar view. B. Postoperative x-ray, lateral view.

pressure and a rubber drain attached to the base as a tourniquet was held with a hemostat. An incision was made in the plantar medical aspect and carried down through the skin subcutaneous tissue to the capsule. Blood was not found within the joint. Traction to the flexor tendon failed to dislodge the sesamoid bone. The incision was extended medially toward the dorsal side to allow better visualization of the joint and sesamoid bone. Another attempt to reduce the dislocated sesamoid was without success. The incision was extended somewhat longer into the dorsal aspect of the toe and better visualization was obtained of the sesamoid and more opening of the joint but, again, by pulling on the hallucis longus tendon and pushing the sesamoid with a hemostat reduction failed again. Then using small dissecting scissors the sesamoid bone was completely removed from the flexor tendon with a hemostat after dissecting around it. The chip fracture was also removed.

X-rays showed that the joint was now normal (Figs. 2A, B). The capsule was closed using interrupted sutures of 2-0 chromic and the skin was closed using interrupted 3-0 nylon sutures. Dressing was applied and the tourniquet released. Blood loss was minimal. The patient was discharged from the operating room to be followed in the office.

He was seen nine days after surgery. The toe was still swollen but there was considerably less pain. X-rays revealed no abnormalities. The patient was seen again six days later. There was minimal swelling and he was walking very well with little pain.

## Conclusion

This is a case of an unusual result of trauma to the great toe. Review of the literature has failed to reveal a similar case.[1,2]

It is important to indicate that this in not the regular sesamoid bone at the interphalangeal joint of the great toe but rather an accessory sesamoid bone.

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1 Sweterlitsch, P.R. et al: Entrapment of Sesamoid in the Index Metacarpophalangeal Joint, J Bone Joint Surg 51A 995 998 (July) 1969

2 Feldman, Frieda et al Case of Wandering Sesamoid and Other Sesamoid Afflictions, Radiology 96 275 283 (Aug.) 1970



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**Abstract: A case with rapid spontaneous recovery following primary intraventricular hemorrhage is reported. The pathophysiology of intraventricular hemorrhage is reviewed. The factors contributing to spontaneous remission are discussed.**

# Primary Intraventricular Hemorrhage With Rapid Spontaneous Recovery

## Case Report and Review of Literature

**M. Seth Hochman, M.D.**

Hemorrhage arising in or near the ventricular wall and in the choroid plexus has been termed primary intraventricular hemorrhage (PIVH).[1] Since Sanders' initial autopsy series of 80 cases almost a century ago,[2] relatively few subsequent cases have appeared in the 20th century literature. Intraventricular hemorrhage beginning in the brain parenchyma and extending secondarily into the ventricular system (SIVH) is far more common and usually fatal.[3] While most earlier cases of (PIVH)[4,5] reflected the same poor prognosis as (SIVH), some more recently reported operated cases[1] and a single reported case with spontaneous resolution[6] have indicated a more favorable outcome. We recently encountered an 85-year-old woman who survived (PIVH) with prompt return of normal level of consciousness and with rapid spontaneous recovery without resultant focal neurological deficit. The case report of this patient and a discussion of the pathogenesis of PIVH and the factors that may have contributed to her survival are subjects of this communication.

To my knowledge, this is the second reported case of PIVH with spontaneous recovery in the English language literature,[6] and the first diagnosed by computerized axial tomography.

Dr. Hochman is Attending Physician, Division of Neurology, Mercy Hospital, Miami, and Clinical Assistant Professor, Department of Neurology, University of Miami School of Medicine, Miami.

### Case Report

The patient, an 85-year-old woman presented with atherosclerotic heart disease, osteoarthritis, and a 20 year history of senile dementia. She was transferred from a nursing home to the hospital because of obtundation and slight fever which were first noted after she was found on the bathroom floor with a hematoma over the left eye approximately 12 hours prior to admission. The patient had been taking vitamin $B_{12}$, furosemide, diazepam, chlorpromazine, acetaminophen and codeine phosphate, aspirin, phenacetin, caffeine (empirin compound no. 3).

On admission the patient was obtunded and unresponsive to verbal commands. Blood pressure was 140/86, pulse 100, respirations 24, and temperature 99 degrees rectal. Left pupil was square-shaped (from prior iridectomy) and unreactive; right pupil was small and reacted briskly to light. Neck was not completely supple. Heart revealed an S-4 gallop, regular rhythm and grade II-III/VI systolic ejection murmur over the left sternal border. Patient responded to pin with movement of right arm. There was a left Babinski. The following laboratory tests were normal on admission: WBC and differential, hgb. hct., prothrombin time, partial thromboplastin time, urinalysis, BUN, glucose, electrolytes, total protein, albumin, calcium, phosphorus, cholesterol, uric acid, creatinine, total bilirubin, alkaline phosphatase, LDH, VDRL. CPK was 299, SGOT 87, and SGPT 30. X-rays of the facial bones and skull were normal. The pineal

appeared midline. Chest x-ray revealed cardiomegaly. EKG showed sinus rhythm, left anterior hemiblock, complete right bundle branch block and nonspecific ST-T wave abnormalities. Two sets of blood cultures and urine culture revealed no growth. The patient was given 12 mg dexamethasone and 20 gm Mannitol IV and intravenously 0.45 saline was begun in the emergency room. Eight hours after admission she responded to verbal stimuli with brief replies to questions. At this time and 12 hours later she was given 40 mg methylprednisolone sodium succinate IV.

The patient was seen in neurological consultation 12 hours after admission and at that time was awake and alert. There was no expressive or receptive aphasia and no dysarthria. She stated that she did not wish to be examined and intermittently followed verbal commands. She stated that she was in the hospital but did not give the day or date. Right pupil was 4 mm and reacted directly. Left pupil was as previously noted. There were full horizontal extraocular movements without nystagmus and mild blepharoptosis bilaterally. Fields were unreliable to confrontation. Left disc was sharp without hemorrhages or exudate. Right disc was not visualized. Fifth, seventh and eighth cranial nerves were normal. The patient would not open her mouth for examination and the 9th through 12th cranial nerves could not be adequately evaluated. Motor examination revealed no focal weakness. The patient reacted to pin throughout all four extremities and bilaterally on the face. Coordination in the upper extremities was normal. Deep tendon reflexes were 2-3+ and symmetrical except for the ankle jerks which were absent. There were bilateral Babinskies present. Neck was stiff in the anterior-posterior direction. Carotid pulses were full and equal with bilateral bruits transmitted from the previously noted murmur. An area of ecchymosis was noted over the left eye and dorsum of the left hand. No Battles' signs or palpable skull fracture were observed. External canals were without blood. A lumbar puncture was performed. Opening pressure was 160; fluid was bloody without clearing. Centrifugation revealed deeply xanthochromic spinal fluid with 153,000 RBC's and 4 WBC's per cubic millimeter. CSF glucose was 65 and protein 165. Serology was nonreactive. Gram, AFB, India ink and fungal stains were normal. CSF culture revealed no growth. Dynamic and static brain scans performed on the first and 12th hospital days were normal. Electroencephalogram performed also on the first hospital day was reported as within normal limits for age (Fig. 1) and demonstrated well-organized symmetrical alpha rhythm following arousal stimulation by noise. On the second hospital day, computerized axial tomography (CAT) revealed marked increase in

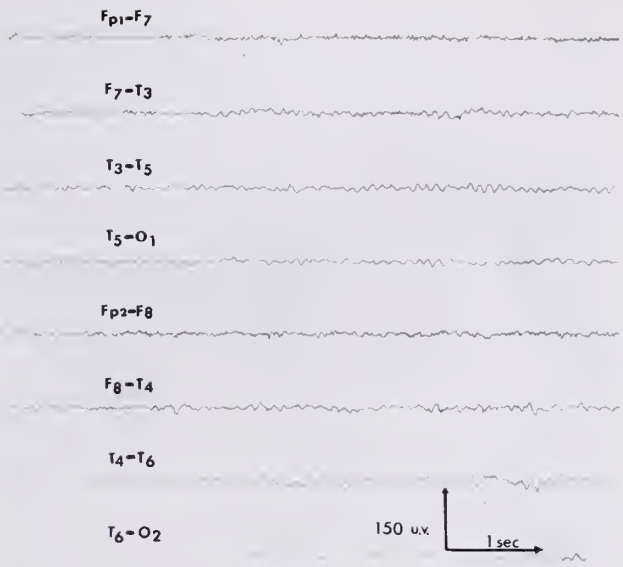


Fig. 1 — Electroencephalogram — first hospital day.

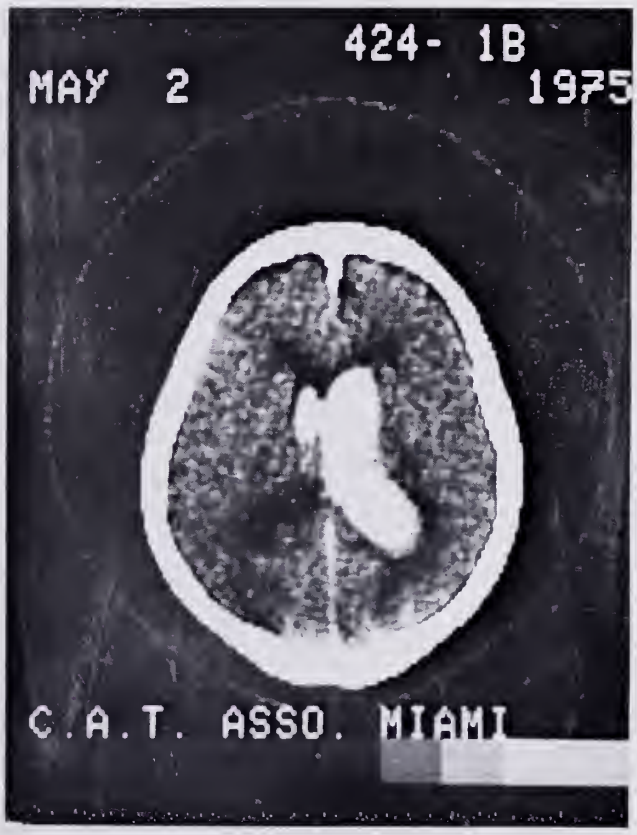


Fig. 2 — CAT scan — second hospital day.

the tissue density of prepontine cisterns, dilated right temporal horn and trigone of the right lateral ventricle. The dilated third ventricle and frontal horn and body of the right lateral ventricle revealed a massive cast of increased tissue density between 46-50 EMI units with a small dumbbell-shaped extension into the left lateral ventricle. Cortical sulci were also dilated (Fig. 2). Repeat prothrombin time and partial thromboplastin time, Lee-White clotting time, platelet count and 60 second thrombin clot formation were normal. Repeat blood cultures (4 sets) revealed no growth. Twenty-four hour avionic tracing showed normal sinus rhythm with occasional PAC's and rare PVC's.

Repeat CAT scan (Fig. 3), done 13 days after admission, revealed partial resolution of intraventricular hemorrhage as manifested by almost complete disappearance of blood in the left lateral ventricle and reduction in the size of cast in the right lateral ventricle. The remainder of the patient's course in the hospital was punctuated by fever, which in the absence of positive cultures, was attributed to the intraventricular blood. From the fifth to the 12th hospital day the patient demonstrated 4/5 strength of the left upper extremity, which then cleared. Throughout hospitalization, she continued alert and was discharged on the 23rd hospital day ambulatory without focal neurological deficit. According to her daughter, the dementia persisted unchanged following recovery from the intraventricular hemorrhage.

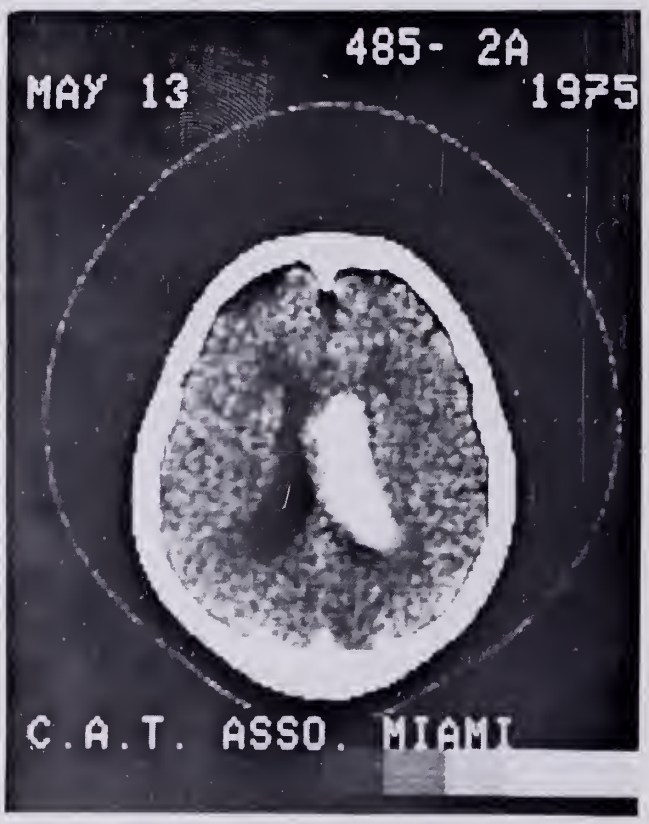


Fig. 3 — Repeat CAT scan — 13th hospital day.

## Discussion

This normotensive patient suffered an intraventricular hemorrhage from which she rapidly recovered. Brain and CAT scans did not reveal evidence of intraparenchymal hematoma, and laboratory tests did not show evidence of impaired coagulation or septicemia. These studies indicate that intraventricular hemorrhage in this patient was primary and not secondary to the more common extension of parenchymal hemorrhage into the ventricular system which may occur following rupture of a ganglionic blood vessel, aneurysm or arteriovenous malformation and hemorrhage within a pre-existing neoplasm.

The etiology of PIVH in this patient remains uncertain. One possibility is traumatic rupture of an intraventricular or subependymal vein secondary to the head trauma which occurred following her fall. Koulouris et al[7] recently reported a 39-year-old male with primary intraventricular hematoma attributed to possible trauma resulting from a fall preceding loss of consciousness. Although the history was not considered completely trustworthy, brain scan and cerebral angiography, inspection of the ventricular cavity at time of surgery and various sections of the surgical specimen did not reveal evidence of vascular anomaly or other abnormality. The authors favored a traumatic etiology although, as in the present case, they could not be certain whether the intraventricular hemorrhage was the cause or effect of the fall. Other more well documented etiologies such as rupture of intraventricular arteriovenous malformation or choroidal artery aneurysm[1] cannot be eliminated in the present case. No further neuroradiological investigations were undertaken in this patient in view of her rapid spontaneous recovery, age, long history of progressive dementia and cortical atrophy documented on CAT scan.

Without definite knowledge of the cause of PIVH in this patient, enumeration of the specific factors that may have contributed to her survival is more difficult. The more likely possibilities, however, will be discussed within the framework of what is known of the pathophysiology of intraventricular hemorrhage. Plum and Posner believe that the rapidly deteriorating neurological function in patients with intraventricular hemorrhage reflects "sudden pressure transmitted through the ventricular system to the floor of the fourth ventricle at the moment of intraventricular rupture."[3] The following experimental observations are consistent with that view. Carpenter et al[8] have shown that autologous blood

injected into the ventricular system of cats produced no deleterious physiological effects. Meyers[9] and Kahn[10] observed that the injection of saline and isotonic chloride solution respectively into a lateral ventricle of dogs adversely affected blood pressure, pulse rate and respiration. Thompson and co-workers[11,12] showed that the rate of injection determined to a large extent the severity of the cardiopulmonary effects. A sudden injection of saline into the lateral ventricle resulted in acute pressure gradients between anterior and posterior fossae which was associated with rapid medullary failure. When intraventricular hemorrhage was produced at the systolic pressure of blood by catheterization of the ventricle and anastomosis of the open end of the catheter with the common carotid artery, the result was immediate decerebrate rigidity and apnea within 30 seconds.

With regard to the present case, if the site of rupture was an intra- or periventricular venous anomalous blood vessel or subependymal vein rather than intraventricular artery, then the resulting intraventricular pressure wave may not have been of sufficient magnitude to cause rapid medullary failure. To date, there have been no reports of rupture of subependymal veins in adult cases of PIVH, although the terminal veins lying beneath the ependyma of the lateral ventricles have been repeatedly implicated in intraventricular hemorrhage in newborns. It has been suggested that the rupture of the terminal veins in the neonate is secondary to increased cerebral venous and capillary pressure caused by heart failure resulting from hypoxia and acidosis.[13] It is conceivable that such a mechanism could also obtain in rare cases of PIVH in elderly patients with cardiopulmonary disese. In the present case, although there is a history of atherosclerotic heart disease, the sequence of events suggests that if rupture of subependymal veins did occur it was secondary to the head trauma which occurred following this patient's fall. Secondly, because of the cerebral atrophy demonstrated on CAT scan and the presumed *ex vacuo* ventricular dilation present prior to hemorrhage, the ventricular system of this patient (who had a long history of dementia) may have been better able to accommodate and diffuse the sudden pressure wave resulting from PIVH.

Ojemann and New[6] in 1963 reported the only prior case of PIVH with spontaneous remission. In their case, an intraventricular hematoma in the lateral ventricle was associated with an arteriovenous malformation involving the posterior cerebral artery and the vein of Galen. According to Pia,[14] the ventricular bottlenecks such as the foramen of Monroe and especially the choroid plexus are important factors in the development of a localized ventricular hematoma. In his view the choroid plexus may seal off the ventricular rupture. A further protective mechanism is the local and general mass shifts with narrowing or displacement of the ventricular lumen. The circumscribed intraventricular hematoma observed in neonatal cases of PIVH has been attributed to the resistance of the ependymal lining in preventing spread of blood extravasated into the ventricular cavities.[15] In terms of the pathophysiology of PIVH discussed previously, an intraventricular hematoma may prevent or, at least, limit transmission of the intraventricular pressure wave through the ventricular system to the floor of the fourth ventricle.

The relatively benign course of this patient raises the possibility that the diagnosis of PIVH may have been missed in the past. Computerized axial tomography may uncover more cases in the future and demonstrate that PIVH is not as unusual as the number of reported cases would suggest. Study of these cases in the future may offer further insights into the pathogenesis and successful management of PIVH and, hopefully, SIVH as well.


## Acknowledgement

I am indebted to Drs. M. Belle, L. Arias and P. Ramos for bringing this patient to my attention.


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Abstract: Precise tissue diagnosis of pulmonary parenchymal infiltrates and mediastinal masses in children with underlying malignancy has presented a considerable surgical challenge. In the past three years, we have explored the usefulness of thoracoscopy in obtaining these diagnoses. The technique is performed under intravenous anesthesia, without the need for endotracheal intubation, as is required for open thoracotomy. Miniaturized telescopic and biopsy equipment is passed through the chest wall under local anesthesia to allow directed biopsy of intrathoracic masses and areas of parenchymal involvement. Between July 1975, and September 1976, 17 children with known or suspected malignancies underwent this procedure at the University of Florida. Twelve patients on immunosupression therapy developed interstitial pneumonia and 10 of these were proven to have Pneumocystis carinii pneumonia by thoracoscopy and biopsy. Five patients have undergone thoracoscopy for presumed intrathoracic malignancies and, in four of these, a definitive diagnosis has been achieved. Thoracoscopy has proven to be a safe and highly reliable method for intrathoracic diagnosis in children with malignancies.

# Thoracoscopy in Childhood Malignancy

Bradley M. Rodgers, M.D.

Since July 1975, the Division of Pediatric Surgery at the University of Florida has explored the use of the technique of thoracoscopy for diagnosis of various pulmonary disorders in children.[1] Our interest in this technique was fostered by the inadequacies of most available methods for pulmonary diagnosis in young patients on immunosuppressing medications for various malignancies.

In the past, there have been basically four techniques for the diagnosis of diffuse pulmonary infiltrates in immunosuppressed children (Table I). Pulmonary aspiration is the oldest and simplest of the techniques and works well if there is an area of infection that is peripherally located. All that one desires is a small amount of fluid for culture. This technique, however, has been significantly less than 100% successful in most series in diagnosing Pneumocystis carinii pneumonia in children who are on chronic immunosuppression.[2,3] In an effort to increase the size of the tissue sample and thereby increase the likelihood of a positive diagnosis, attempts have been made to utilize various biopsy trocars. Unfortunately, despite slight increases in diagnostic accuracy, these techniques have yielded a significant increase in the complication rate in the form of bleeding and pneumothorax.[4] Transbronchial biopsy, utilizing the flexible bronchoscope and small biopsy forceps which can be passed to the periphery of the lung, has been successfully employed in adult patients. This technique has proven unsuccessful in small children, however, because of the small diameter of the tracheobronchial tree. The standard approach to pulmonary diagnosis in children, therefore, has been the open-lung biopsy.[5] This procedure requires general anesthesia with endotracheal intubation and may be a

Table 1. — LUNG BIOPSY — Techniques

1. Pulmonary Aspiration
2. Trocar Biopsy
3. Transbronchial Biopsy
4. Open Biopsy

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Delivered to the Second Annual Seminar on Childhood Cancer, Sarasota, October 3, 1976.

major operative undertaking in these ill patients. The morbidity and mortality of this procedure, especially in children with Pneumocystis carinii pneumonia, has been unacceptably high. In the past, this has led to delay in referral of these patients until quite late in their course when the institution of therapy has been less effective.

Dissatisfied with these modalities of diagnosis, we have turned to the use of thoracoscopy in an attempt to find a rapid and safe way to make a pulmonary tissue diagnosis in these children. Thoracoscopy is not a new procedure; it was first employed by Jacobaeus in 1910.[6] Initially cystoscopy equipment was utilized, primarily to dissect pleural adhesions in patients with tuberculosis undergoing therapeutic pneumothorax. Because of the limitations of the equipment and optics, this technique fell into disuse and has not been extensively utilized in the past 40 years.

With the introduction of newer fiber-optic lens systems by the Karl Storz Company of America, we felt that the technique of thoracoscopy deserved a new trial. The equipment we have used consists of the standard pediatric peritoneoscopy instruments, including infant and pediatric trocars and telescopes and biopsy forceps which pass through them (Figs. 1 and 2). The infant trocar has been employed in patients as young as four weeks of age without difficulty. In order to avoid some of the complications of general inhalation anesthesia in these critically ill children, we have chosen to use intramuscular ketamine anesthesia with a small amount of Xylocaine local anesthesia supplement. The technique has proven quite simple to perform and may be completed rapidly.

The patient is brought to the general operating room and administered intramuscular ketamine. He is then positioned on the table in the appropriate position depending upon the hemithorax to be visualized. The chest is prepared and draped as for any surgical procedure and a small amount of local anesthesia employed. The thoracoscopy trocar is inserted through the sixth intercostal space, much as if one were inserting a chest tube. The channel through the center of this instrument allows the introduction of air into the hemithorax causing the lung to fall away from the chest wall and facilitating visual obervation of the pleural surface. Through this trocar the telescope is passed and the entire visceral pleural surface and mediastinum visualized (Fig. 3). A second trocar is then passed through the same intercostal space for passge of the biopsy forceps and suctioning equipment. These instruments are insulated so that they may be used with electrocautery if bleeding should ensue. Directed pulmonary biopsies may be taken as in the case of diffuse pulmonary involvement with Pneumocystis. A piece of tissue measuring 3 x 4 mm is obtained suitable for "touch" preparations and permanent mounts. The trocars are removed and a small chest tube is left in place for 12 to 18 hours postoperatively. This entire procedure takes approximately 15 minutes to perform.

Over the past 15 months, we have performed thoracoscopy on a total of 23 children, 17 of whom had known malignancies or were diagnosed as having a malignancy by thoracoscopy. Initially we utilized this procedure primarily for diagnosis in patients on immunosuppression presenting with diffuse pulmonary

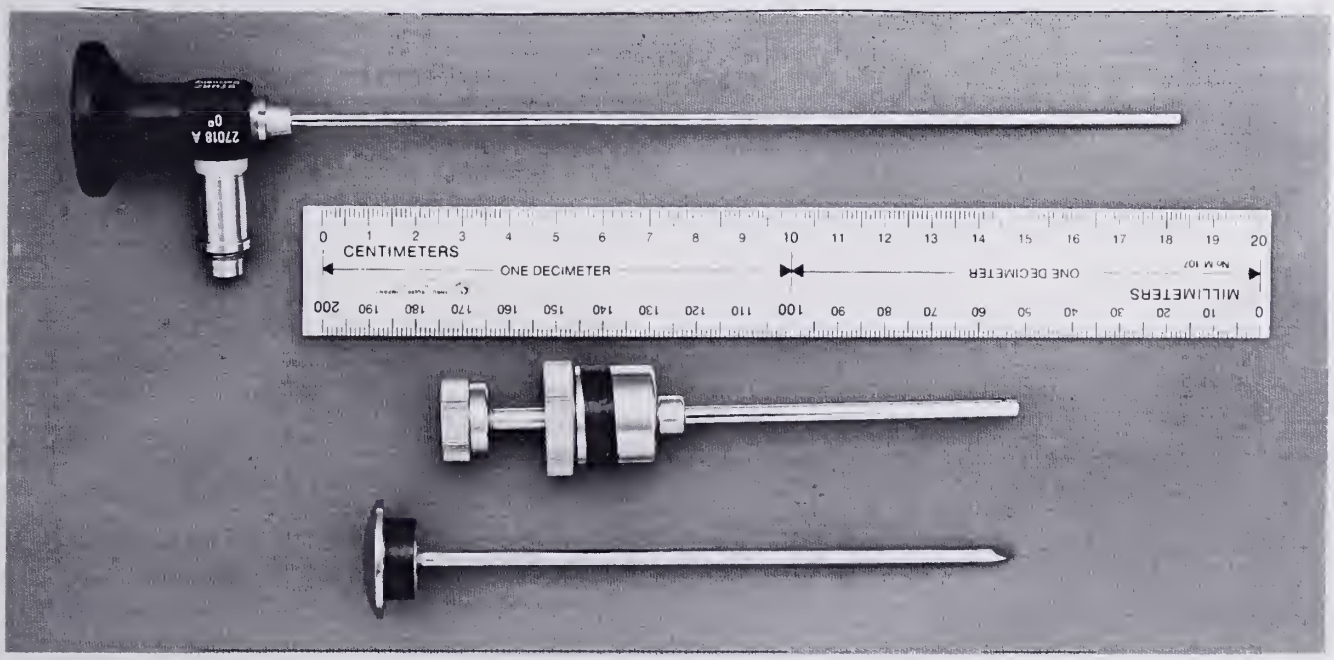


Fig. 1. — Thoracoscopy telescope and trocar. The trocar contains a one-way valve, preventing escape of air from the hemithorax under observation.

Fig. 2. — **Insulated biopsy forceps which pass through the thoracoscopy trocar. A biopsy measuring 3 x 4 mm may be achieved with this instrument.**

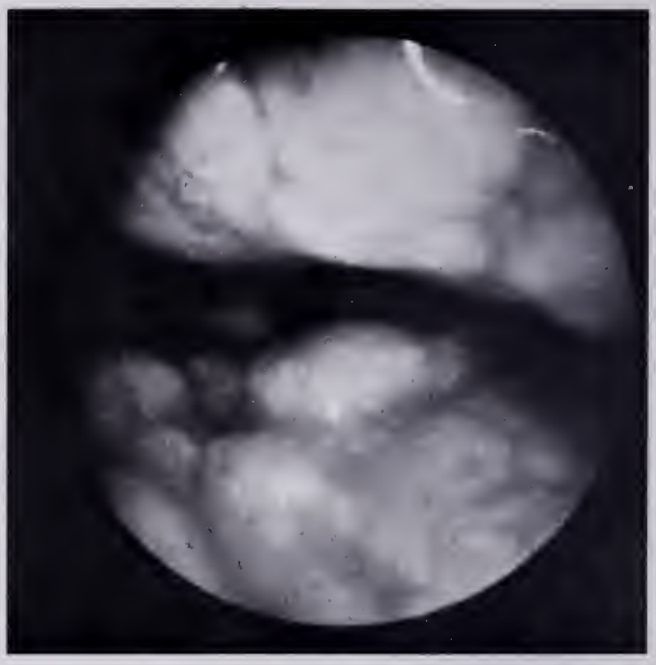

Fig. 3. Thoracoscopy view of major fissure in patient with fungal pneumonia. Involvement of the visceral pleural surface is evident.

infiltrates and this remains one of our most important indications to date. Twelve immunosuppressed patients with underlying malignancies were thoracoscoped for suspected Pneumocystis carinii pneumonia: Ten of these had underlying leukemia or lymphoma, one had been treated for rhabdomyosarcoma of the head and neck, and one for metastatic Wilms' tumor. All the patients had symptoms of respiratory insufficiency and fever and all but one had an abnormal chest x-ray. Ten of these patients were proven to have Pneumocystis carinii pneumonia by thoracoscopy and biopsy. With the earlier diagnosis of this disease, the clinical response of these patients to Septra therapy has been dramatic. Many of the patients we have biopsied have rapidly become asymptomatic and have been discharged from the hospital within three days of diagnosis. In the two patients in whom biopsies have been negative for Pneumocystis pneumonia, we have, nonetheless, made a specific tissue diagnosis of interstitial fibrosis in each case. Five patients have been thoracoscoped for presumed intrathoracic malignant lesions. In four of these patients, a definitive diagnosis of intrathoracic malignancy was made by thoracoscopy and biopsy and in two of these other areas of unsuspected intrathoracic involvement were located by thoracoscopy. The fifth patient was found to have a benign bronchogenic cyst in the posterior mediastinum. In this group of 17 patients with confirmed or suspected malignancies, there has been no operative mortality from the procedure of thoracoscopy. Two patients suffered minor morbidity with small pneumothoraces which required repositioning of the intercostal chest tube. There has been no hemorrhage and no persistent bronchopleural fistulae in this group of patients.

In summary, we have reexplored the usefulness of thoracoscopy for the diagnosis of intrathoracic pathology in children with underlying malignancy. With newer instrumentation, this technique has proven extraordinarily valuable. The procedure may be rapidly performed without the necessity for endotracheal intubation. Morbidity has been minimal and there has been no mortality in this group of patients. Thoracoscopy appears to be safer and more accurate than any other technique available for pulmonary diagnosis in children and has allowed for early and specific therapy in these immunosuppressed patients.

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DEPARTMENT OF INTERNAL MEDICINE

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SPECIAL ARTICLES

**Abstract: An examination of increasing government intrusion in academic medicine and the private practice of medicine. A few of the many unwarranted intrusions are presented: the Federal Trade Commission (FTC)'s investigations, the Federal Drug Administration and drug package inserts for patients and the new regulatory federal agency, the Office of Health Technology's recommendations.**

**A critique of the Carter Administration's hospital cost containment proposal and the FTC is given.**

**Doctors as citizens are urged to help other citizens identify the health care problems and to help citizens organize ad hoc coalescences to influence governmental actions.**

**Vigilance and involvement by physicians not only in organized medicine but in citizen action is recommended. Unity and solidarity of physicians also involved as citizens are considered to be essential for increasing the options for salutory and constructive efforts by the medical profession against the self-serving and self-perpetuating federal medical bureaucracy.**

# Government Interference in the Practice of Medicine

**Edward Pedrero Jr., M.D.**

The American physician's attempts to preserve his individual freedom and responsibility in private practice are seriously challenged by increasing government interference. A basic fact of life is the growth of the federal role and its attendant bureaucracy. The "Federal Register," a General Services Administration publication contains update of the various rules, regulations and legal notices emanating from the executive branch of the government. The number of pages totaled 10,528 in 1956, 16,850 in 1966 and 60,221 in 1975.

The Federal Trade Commission (FTC) was established in 1914 under the Federal Trade Commission Act passed by Congress at the request of President Woodrow Wilson. Wilson anticipated an agency of experts to protect businessmen from unfair acts by competitors. The agency has gone beyond the role envisioned by its founders. From the limited Wilsonian concept of a guardian agency for business, the FTC has evolved into a powerful quasi-judicial body.

Since mid-1975 the FTC—the federal government's catch-all business and consumer-protection agency—has launched extensive investigative activities within the medical and health care fields. Officials have called the inflation rate for health and medical care services unusually high and question whether unjustified constraints operate to raise prices. They argue that the American health care delivery system is so structured that cost consciousness is virtually nonexistent. The FTC claims that controls inherent in a competitive, knowledgeable, free market system do not appear to operate in the delivery of health services and that it is the duty of the FTC to correct this situation.

The FTC has taken steps to secure discontinuance in the use of relative value studies (RVS) on the basis that

they constitute a price-fixing scheme developed through professional health associations. Medicare officials have noted that RVS "could be used as a price-fixing scheme" but find the system useful in coding and terminology for claims processing and for filling gaps in information about what reasonable and customary charges are in an area.

The FTC has taken more actions in the past three years which affect delivery of health services than at any time in its 64 years history. The FTC has continuing investigations to determine if there are existing professional or other practices which impede the development of HMOs as an alternative form of service delivery. The FTC has announced investigations to determine whether the Blue Shield-physician relationship has an unfair effect on establishment of fee levels. The FTC has authorized investigations into providers and sellers of ophthalmic goods and service to determine whether there is a violation of the FTC Act. The FTC has announced investigation to determine whether the American Medical Association has illegally restrained supply of physicians and health care services through activities related to accreditation of medical schools and graduate programs. The Liaison Committee on Medical Education (LCME) of the Association of American Medical Colleges and the AMA Council of Medical Education have been accrediting medical schools since 1942. The LCME may accredit, disaccredit or place medical schools on probation after survey teams visit and evaluate every medical school at least once every seven years.

Whether FTC efforts will lead to lower costs, increased competition and better health care is difficult to perceive now. In the past, law enforcement has not been an effective means for encouraging change in the health care system.

In 1968 the President of the United States requested the American Bar Association (ABA) to conduct an investigation of the FTC because of complaints that the Commission was manipulated by the agents of commercial predators and was impervious to governmental and citizen monitoring. Ralph Nader and a team of seven young investigators (later to be called Nader's Raiders) were assigned the task by the ABA. Nader's team was frank in stating that its report was a critique and not an appraisal. The Nader Report pointed out that several hunderd lawyers were employed by the FTC. It recommended the hiring of a limited number of full-time engineers, doctors and product experts to supply continual advice to the FTC. This was never done.

Donald Kennedy, Ph.D., Commissioner of the Food and Drug Administration (FDA) in an address to the 37th Annual Meeting of the American Medical Writers Association on September 27, 1977 announced that the FDA was vigorously pursuing the concept of patient package inserts. Dr. Kennedy stated that it was part of a general effort to help "demystify" the relation between physician and patient.

According to Commissioner Kennedy, the FDA would translate the complex language presently used in physicians' package inserts into patient package inserts with plain language statements of why patients should follow the physician's instructions, what the drug is intended to do, and the *associated* risks and benefits. The FDA believed that in this manner patients would be more informed of what their medications are and would cooperate more with their physicians. The FDA further believed that the patient inserts would be a more cost-effective forum of medical education because the physicians in conjunction with pharmacists and other allied health professions would increase public information. The FDA Commissioner claimed that the dominant form of medical education in the United States was not the medical schools but the pharmaceutical companies.

The FDA Commissioner's incredulous remarks about the dominant role of the pharmaceutical companies in medical education is a matter of public record. Patient package inserts as described by Dr. Kennedy with their "associated risks" can only add fire to the burning flame of the malpractice fever.

The FDA is a regulatory agency that almost always increases prices for health consumers and decreases options for salutory and constructive efforts by the medical profession. The FDA is yet to explain why large experimental doses are used routinely in the animal testing of drugs.

There has been an unwarranted intrusion by the federal government into academic medicine. The health manpower legislation enacted by Congress violates a basic academic freedom—the freedom of a medical school to select its own students in a nondiscriminating way, according to its own publicized standards. It also discriminates against every American student who failed to be admitted to an American medical school, but who could not, for whatever reason, enroll in a foreign medical school.

The government using the leverage of federal dollars is forcing the nation's medical schools to improve social priorities while compromising the schools' integrity and impairing the tradition of academic freedom. The premise of the government is that society which pays the bulk of medical school bills has an interest in the priorities.

The Carter Administration's hospital cost containment proposal is another unwarranted intrusion in the practice of medicine. The proposal focuses on government and third-party expenditures and hospital revenues. It ignores several components contributing to increased hospital costs: inflation in the prices hospitals must pay for the goods and services they buy and over

which they have no control; government-mandated service and operating costs which fill pages of the "Federal Register" and include such new cost-generating provisions as pension reform and handicap regulations; the population's increasing demand for sophisticated services, and the existence of aged and substandard facilities. Hospitals have to deal with all these important contributors, yet the government ignores them all. A nationwide cap fails to recognize or account for the very real regional and institutional variations in uncontrollable costs.

The most recent intrusion into the private practice of medicine in America is by the Congressional Office of Technology Assessment (OTA). An OTA document questioned widespread physician acceptance of 12 procedures: Pap smears, fetal monitoring in delivery, coronary bypass surgery, skull x-rays after head injuries, mammography, hyperbaric oxygen treatment for cognitive deficits in the elderly, chemotherapy for lung cancer, prophylactic antibiotics before colon surgery, anthihistamines and decongestants for otitis media, hysterectomies, tonsillectomies and appendectomies.

Largely on the basis of OTA's recommendations, both houses of Congress have approved legislation authorizing an Office of Health Technology in the Department of Health, Education and Welfare (DHEW) with a budget over the next three years of between $70 million and $75 million.

OTA recommends that medical and surgical procedures be subject to federal regulation. Moreover, OTA advises that reimbursement (including private reimbursement under Blue Cross-Blue Shield) be subject to evaluation for efficacy, safety and suitable indications.

The creation of an Office of Health Technology in DHEW produces still another self-serving and self-perpetuating federal program within the growing federal medical bureaucracy. To patients it will mean increased cost in doctor, drug and hospital bills. It is characteristic for government agencies to have conflicting and duplicative regulations for the multiple health delivery system we enjoy in America.

Medical bureaucracies—FTC, FDA, OTA and HEW—are afflicted with certain persistent maladies: obsessive adherence to established practice regardless of resulting hardship, persistent addiction to formality, and astigmatic inability to perceive the totality of government because of preoccupation with one of its parts. Is treatment of these maladies whether endemic or sporadic an exercise in futility? Is it the fate of organized medicine to be regulated by a Medical Interstate Commission? What lies ahead for organized medicine with the ever increasing government interference?

The key to tomorrow is **doctor action**. The doctors as citizens should help other citizens identify the health care problems, doctors should help citizens organize ad hoc coalescences to influence governmental actions, and doctors should "politize" citizens to action. Physicians should break with illusory ideas and come directly to grips with the problems that affect the unity and solidarity of physicians.

We must move from the "we don't know" and "we don't care" to the "we shall be involved." With an uncompromising and a single-minded intensity not to lose, America's physicians will find that governmental interference is not inexhaustible and that the free practice of medicine can still be preserved.

The American Revolution rang with the declaration that "the price of liberty is eternal vigilance." Today the price for the free practice of medicine in America is eternal vigilance but it requires involvement by all physicians not only in organized medicine but in citizen action.

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**Nothing is this world can take the place of persistence. Talent will not; nothing is more common than unsuccessful men with talent. Genius will not; unrewarded genius is almost a proverb. Education will not; the world is full of educated derelicts. Persistence and determination alone are omnipotent. The slogan "press on" has solved and always will solve the problems of the human race.**

**Calvin Coolidge**

*"I wish I was a fish," said the wart. "What sort of fish?" "I think I should like to be a perch," he said. "They are braver than the silly roach and not quite so slaughterous as the pike are."*

*T. H. White*[1]

# A Parable of the Fishes

**Ernest C. Miller, M.D.**

Long ago, when oceans covered more of the Land than they do now and fish reigned supreme, speaking and reasoning as men do today, there came to be held a special council in one of the larger republics of fish, the United Skates. The problem addressed concerned the Luna Fish, that strange denizen whose antics of tail-walking or backward-swimming caused much consternation but whose occasional unprovoked attacks on fellows or self-destructive acts, such as the Trout, who deliberately swam into the aboriginal's spear, was enough to cause piscatorial panic. It wasn't that help was not available for these poor fish. God knows, the Sturgeons offered their lucotomies. There were shock treatments by electric eels. A number of individual and Grouper fisheotherapies were available and there were the Ocean Hospitals wherein treatment could be provided under the watchful eye of highly trained and dedicated nurse Sharks.

Treatment was not the problem; rather, how to get the Luna Fish involved in it. After a great deal of floundering about and many days of discussion a practical solution was come upon wherein it was decided that a net would be stretched across the channels between the reefs, the mesh to be constructed in such a way as to allow free passage of all except the Luna Fish. Once ensnared, the suspect Luna Fish would be taken to a secure area of the reef, a Luna Center, and administered to accordingly. If treatment was indicated, it could be done there or at the Ocean Hospital. Should he, on closer scrutiny, be found to have been mistaken for a Luna Fish, he would be released to swim again.

Operation "Net" began, but problems followed. The mesh was found to be much too large. Many of the Luna Fish passed through and continued to disrupt the schools. To combat this, it was decided to modify the mesh in such a way that the strands could be

manipulated by net functionaries. Less Luna Fish escaped now but additional problems were spawned. A number of ordinary fish or semi-Luna Fish were ensnared and sent to the Luna Center or even to the Ocean Hospitals. When this occurred there was considerable carping and outcries were heard that "Someone will fry for this." A Star researcher exposed a hospital and wrote an article entitled "On Being Fish in Luna Fish Places."

Within the law governing fishy behavior, it is provided that common criminal fish such as the White Shark, Piranha or Killer Whale have the right to a fair trial. This concept was extrapolated to apply to the accused Luna Fish, who would not voluntarily submit to treatment, to allow him the opportunity to be heard in court. Fisheotherapists, however, did not relish the prospect of a court confrontation and possibly having the scales against them. Many clammed up and would treat only Goldfish or Silver Dollars from the shallows. Some therapists proselytized the notion that the Luna Fish concept was only a myth anyway. At the Luna Center hardly a day passed that the conch phone did not ring, heralding a complaint, a querulous question, a demand or pejorative statement regarding a fish person having been caught or a Luna Fish person not having been caught "wrongly." Occasionally such calls would come from the Kingfish himself.

Because of these many problems, a plebiscite was arranged so that all points of view could be heard, differences reconciled and faults in the law corrected. The Octopus was made chairman because of his obvious superiority in grasping things. To the left were the dwellers of the bottom: Mollusks, Crustaceans, Anemones, Stars, Rays, Groupers, Croakers, Bass, and Common Shiners. In the middle sat the Mackerel, Tuna, Cod, Salmon, and Haddock, the largest, most prolific and, indeed, the most provident of all the inhabitants. Off to the right were the Dolphins, Cobia, Wahoo, some Sails, a few Swordfish, and one Blue Marlin.

"May we please have order," intoned the Octopus, tapping the rostrum lightly with a polished coral gavel. For a moment his eyes touched and lingered briefly on a plump Blue Point Oyster who had been engaged in noisy conversation with several young Snails.

"If everyone will please settle down," he said pointedly, "we will hear from the floor."

A Nassau Grouper arose and with a mellow rich Grouper voice began.

"Please understand. We bottom fish see the need for the net but when it gets right down to it, it seems to us that we are the only ones who are ever caught up in it and have to go to the Luna Center or to the other place. Why only us and not the Sailfish crowd?"

"Hear! Hear!" cried the Crabs who were joined in chorus by the Parrot Fish. The Anemones waved their arms and a number of affirmative grunts were heard.

"Not only that," cried the Squid, animatedly rising to his tail and in his excitement unintentionally emitting a small jet of ink. "What's so wrong with swimming backward, anyway?"

The Drums beat a tattoo and some Fiddler Crabs played several bars of "For He's a Jolly Good Fellow."

Squid, you are only clouding the issue," spoke Acanthurus chirurgus, the doctor fish employed at the Luna Center. "The law is good. The fundamental issue is that the hospital in the Ocean has a waiting list and even once there the Luna Fish are kept only a few days then they are back in the mainstream, only to be fetched up in the net in an endless circle. Furthermore, the law has done nothing to deal with the basic problem which is the incidence and prevalence of Luna Fish."

"Nonsense," cried an administrative Lamprey from the flats. "If the Center did its job by screening, testing and containing the Luna Fish in the community by providing better aftercare, the problems imputed to us at the hospital level would cease to exist."

The Sergeant Major Fish in charge of police interrupted the Eel.

"This law squanders my officers' time. When they should be out chasing Viperfish, Sharks, and Morays, police are stuck with the paper work at the Luna Center. My boys would sooner cart a Luna off to jail than to go through the hassle at the Center."

"Shame, shame. Trash the Pig Fish!" shouted a cluster of Red Snapper and Black Bass. A scuffle broke out among some Sea Urchins and the water became turbulent with sediment stirred up by the numerous agitated tailfins thrashing about.

"Order, please," implored the Octopus. "Odds fish," he thought to himself. Absentmindedly he extended a tentacle to the plump Blue Point Oyster, picked it up and put it in his pocket, meanwhile tapping the podium with his gavel and thinking to himself, "We obviously have a long way to go."

An aged Jew Fish, thoughtfully munching a sea cucumber while quietly watching the proceedings from the side, turned to go. As he swam slowly off, someone heard him say, "I hope they remember Bukovsky[2] when they design the new net."

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# Control of the Communicable Diseases

R. Michael Yeller, M.D. and E. Charlton Prather, M.D.

There's an old axiom which says, in effect, that the control and prevention of anything depends upon the recognition or threat of its presence. Thus without recognizing the presence of thieves, there would be no locks; without the presence of chinch bugs in the neighbor's grass, there would be no spraying of our own; without the threat of poliomyelitis, no immunization; without a knowledge of the presence of *Neisseria gonorrhea*, no therapy.

Another old axiom says that prevention is possible only through prediction. It's the prediction of things to come that prompts preventive action. All therapy and treatment courses are based upon it.

Prediction, in turn, is possible only through ascertainment of patterns — the basis of all scientific endeavor.

Control of the epidemic scourges has been a responsibility of government a long time. Among the earliest records are laws regarding detection of disease occurrence and procedures for controlling threatened outbreaks. Thus, Moses, during the exodus of the Israelites, instituted a rather sophisticated and required system of reporting occurrence of selected epidemic conditions (Leviticus Chapter 13). Through observing what was occurring among which groups, patterns could be discerned, predictions made and preventive procedures instituted. The system has guided public health action ever since. The reporting of communicable diseases is a required part of every body of law in the world.

Florida's basic public health law, Chapter 381, Florida Statutes, provides for the reporting of communicable diseases: "Any attending practitioner, licensed in Florida to practice medicine, osteopathic medicine, chiropractic, naturopathy, or veterinary medicine, who diagnoses or suspects the existence of a disease communicable among humans or from animals to humans shall immediately report the facts to the Department of Health and Rehabilitative Services." And, "Periodically, the Department shall issue a list of diseases determined by it to be communicable within the meaning of this Chapter and shall furnish a copy of said list to the practitioners listed (above)."

A revised and updated list was recently distributed, the first in more than 20 years. Copies were provided all practitioners. At first glance the list seems formidable. Seventy-six diseases and conditions are included. Most are rare without endemicity in Florida or the United States; few are common in Florida — all have epidemic potential. Undetected occurrence of many could portend regrettable consequences. Some are so common, one would well question the logic of reporting them at all!

From patterns predictions are possible. From predictions prevention becomes feasible. Variations from the predictable are especially notable in searches for cause. The early history of poliomyelitis is exemplary. In the 1920's and early 1930's, polio in the U.S. was an uncommon disease, confined largely to the upper classes of urban society and regularly occurring in six year cyclic patterns with incidence peaks during summer months. Its cause was entirely unknown. By the late 1940's, polio was a disease predominately of the lower socioeconomic groups including rural dwellers, with increasingly larger epidemic peaks every summer. It was these patterns of change that pointed the way to the ultimate isolation and identification of the three polio viruses. The tale-telling data had been accumulated over the years through routine required morbidity reporting by selected states. Our present day understanding of hepatitis, diphtheria, influenza and scores of other conditions has been derived similarly. The observation of John Snow during the mid-1800's into cholera and the Broad Street pump are classic.

Variations from the expected have particular relevance to epidemic containment. We expect a low level of strep infection among all population groups most of the time but a rising incidence among any particular group is more often than not a Group A streptococcus and portends, unabated, a bumper crop of rheumatic consequences early, and a flurry of nephritic problems later. Detection of the variation from the expected and assertive preventive action on the part of all involved prevent most of the tragedy.

No one practitioner is able to see the subtle variations early but by combining the experiences of all, the total becomes greater than the sum of the individual parts.

A recent episode in the epidemiology of salmonellosis is illustrative. The epidemiologic investigation of

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*Dr. Yeller is Medical Program Administrator, Disease Control Program, Health Program Office, and Dr. Prather is an Associate Editor of The Journal.*

## THE NOTIFIABLE DISEASES
## FLORIDA

Amebiasis
Animal Bite
Anthrax
Botulism
Brucellosis
Cat Scratch Fever
Chancroid
Chickenpox
[1]Cholera
Congenital Rubella Syndrome
Cryptococcosis
Cytomegalovirus Infections
Dengue
[2]Diphtheria
Echinococcosis
Encephalitis
Food Poisoning and Infections
Giardiasis
Glanders
[3]Gonorrhea
Granuloma Inguinale
Hansen's Disease (Leprosy)
Hemorrhagic Fevers, Other
Hepatitis *A*
Hepatitis *B*
Hepatitis Asso. w/Blood or Blood Products
Hepatitis, Unspecified
Herpangina
Herpes Simplex Virus Type 2
Histoplasmosis
Hookworm
Impetigo (Staphylococcal-Streptococcal)
[1]Influenza
Lassa Fever
Legionnaires' Disease
Leptospirosis
Lymphogranuloma Venereum
[1]Malaria
Marburg Fever
[2]Measles
Meningitis, Aseptic
Meningitis, Meningococcal
Meningitis, Other Bacterial
[2]Mumps
Newborn Infections (Gastrointestinal, respiratory, dermal, other)
Paralytic Shellfish Poisoning
[2]Pertussis
[1]Plague (Bubonic)
[1]Plague (Pneumonic)
[1, 2]Poliomyelitis
Psittacosis
Rabies
[1]Relapsing Fever (Louse-borne)
Reye's Syndrome
Rheumatic Fever
Rickettsialpox
Ringworm of the Scalp
Rocky Mountain Spotted Fever
[2]Rubella
Salmonellosis
Scarlet Fever
Schistosomiasis
Shigellosis
[1]Smallpox
Staphylococcal Infections, other
Streptococcal Infections, other
Surgical Wound Infections
Syphilis
[2]Tetanus
Toxoplasmosis
Tuberculosis
Tularemia
Typhoid Fever
[1]Typhus Fever (Louse-borne)
Typhus Fever (Murine)
[1]Yellow Fever

[1]Disease of international concern—to be reported immediately by phone to County Health Unit Director (CHUD)
[2]Disease preventable by immunization
[3]Any inflammation or unnatural discharge in the eyes of a newborn child to be reported within 6 hours to CHUD

individual cases from many locations about the U.S. yielded the suggestion that a particular brand of cake mix was somehow causative. Further follow-up demonstrated that powdered eggs from a particular farm were the vehicle. In the absence of a mechanism for pooling the knowledge, significance of the outbreak would not have been detected and appropriate control mechanisms instituted for preventing similar problems in the future.

It is upon these several bases that Florida requires the reporting of communicable and epidemic diseases:

The detection and prevention of spread of the internationally quarantinable diseases (cholera, influenza, malaria, plague, polio, relapsing fever, smallpox, typhus and yellow fever);

The detection and containment of other conditions possessing high epidemic virulence (psittacosis, salmonellosis, shigellosis, encephalitis, for example);

The systematic surveillance of selected conditions against which specific program is addressed by law (venereal diseases, tuberculosis, immunizable diseases, for example);

The systematic surveillance of selected conditions of particular public interest (leprosy, rabies in animals, Legionnaires Disease, chicken pox, shellfish poisoning, for example);

The surveillance of patterns for the purpose of detecting and ultimately explaining variances (hookworm, surgical wound infections, amebiasis, for example);

The systematic surveillance of identified but unexplained entities for the purpose of adding to the general knowledge (Reye's syndrome, for example);

(And to answer the frequent inquiry about "What's this going around?")

The systematic collection of morbidity data has much utility. We hope every Florida physician will understand the reasons for pooling collective knowledge, benefit from it and recognize the importance of his individual participation in its accuracy and utility to the public's health.

• Dr. Yeller, 1323 Winewood Boulevard, Tallahassee 32301.

**Abstract: Chance has often played an important role in scientific discovery. Two types of chance observation are described. These differ in that the first type requires no overt cue or clue to the solution of a problem. It follows a long-term interest in the problem and comes into consciousness at a time when the individual is not consciously working on the problem. The second type is triggered by a cue or clue, the result of which is either the solution to a problem or the means by which the solution may be found. The sine qua non for both types of chance observation is a prepared mind; that is, a mind that has been preoccupied with the solution to a problem.**

# Role of Chance in Discovery

**Melvin J. Fregly, Ph.D. and Marilyn S. Fregly, Ph.D.**

During a recent discussion of scientific discoveries, a colleague remarked, "Luck is sometimes better than good planning." This comment led us to ponder the role of chance, or luck, in scientific research. There are many amazing examples. Alfred B. Garrett[1] has gathered together examples of apparent chance occurrences which resulted in discoveries of great significance.

For example, Dr. Otto Loewi, Professor of Pharmacology at the University of Graz in Austria, worked for some time to try to determine how the electrical impulses known to travel along the vagus nerve were able to slow the beating of the heart. Another pharmacologist, the Englishman, Sir Henry Dale, had shown that a chemical substance called acetylcholine, when injected into the blood, could mimic the effect of the electrical impulses in the vagus nerve and slow the beating of the heart. Dr. Loewi was certain that the electrical impulses passing along the vagus nerve produced acetylcholine, or a similar substance, which was responsible for the slowing of the heart. He was unable to devise an experiment to test this hypothesis.[2]

One night, after falling asleep while reading a novel, Dr. Loewi awoke with a brilliant idea. He kept a pencil and paper near his bed and jotted down some notes. When he awoke next morning, he was aware of having had an inspiration during the night and reached for the paper on which he made his notes. To his great disappointment he could not understand what it was he had written on the paper. He went to his laboratory hoping he would be able to decipher the notes if he surrounded himself with familiar apparatus. Throughout the day he frequently withdrew the paper from his pocket and studied it, hoping to gain insight. At the end of the day he still was unable to decipher his notes; nonetheless he felt certain that the thought that occurred to him the previous night provided a clear solution to the problem he had been unable to solve for so long.

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This article is based upon a Presidential Address delivered before the Society of the Sigma Xi, University of Florida Chapter, May 31, 1978.

From the Departments of Physiology and Behavioral Studies, Colleges of Medicine and Liberal Arts and Sciences, University of Florida, Gainesville.

Dr. Melvin J. Fregly is Professor of Physiology, College of Medicine, and Dr. Marilyn S. Fregly is Assistant Professor of Behavioral Studies, College of Liberal Arts and Sciences, University of Florida, Gainesville.

That evening he went to bed early. To his great joy he again awoke in darkness with the same flash of insight that had occurred the night before. This time he carefully recorded it before he went back to sleep. Early the next morning he hurried to the laboratory and performed what Walter B. Cannon, the great American physiologist, called "one of the neatest, simplest and most definitive experiments in the history of biology."[3] Loewi proved that the response of the heart to stimulation of the vagus nerve was mediated by a chemical produced at the nerve endings.

His experiment was a simple one. He prepared two frog hearts which he kept beating by means of a salt solution. He then stimulated the vagus nerve to one of the hearts until it stopped beating. When he removed the salt solution from that heart and applied it to the second heart, it brought the heart to a standstill. Loewi had proved that electrical impulses were transmitted to the heart by chemical intermediation — an observation of such importance that it won for him a share of the Nobel Prize in Physiology and Medicine in 1936.

An additional example of an important chance or lucky observation is that of the discovery of penicillin. Sir Alexander Fleming, a British bacteriologist, had long been interested in the infectious process. He had observed that leucocytes destroyed bacteria. He pointed out that many antiseptics in use at the time had greater antileucocytic activity than antibacterial activity and were not likely to be successful in the treatment of septic wound.

In September 1928 he was examining bacteriological plates containing colonies of staphylococcus bacteria. To do so he had to expose the colonies to room air thereby subjecting them to contamination. He then set the bacteriological plates aside and several days later noted that the plates had become contaminated with a mold. On closer observation he realized that staphylococcal colonies near the mold were being dissolved by the mold. Fleming recognized the importance of this observation and was later able to show that the mold was not toxic to leucocytes. He eventually identified the mold as belonging to the genus *penicillium*. This chance observation gave the world penicillin and won for Fleming a share of the Nobel Prize in Physiology and Medicine in 1945.

The mold was well known to bacteriologists. Why hadn't someone made this observation before? Fleming put it succinctly in his autobiographical sketch: "It is certain that every bacteriologist has not once, but many times, had culture plates contaminated with molds. It is also probable that some bacteriologists have noticed similar changes to those (noted by me), but that, in the absence of any special interest in naturally occurring anti-bacterial substances, the cultures have simply been discarded. It was, however, fortunate that with (my background), I was always on the lookout for new bacterial inhibitors and when I noticed on a culture plate that the staphylococcal colonies in the neighborhood of the mold had faded away, I was sufficiently interested in the antibacterial substance produced by the mold to pursue the subject."[4]

Louis Pasteur, the famous French bacteriologist, provides a rational explanation for the luck experienced by Loewi and Fleming. He stated, "In the fields of observation chance favors *only* the minds which are prepared."[5] So the probability that one may make a significant observation by chance or by luck is greatly improved by possessing a mind which has been prepared by a preoccupation and concern with the solution of a puzzling problem.

These flashes of genius or lucky experiences seem to be of two types. The first may be called the "scientific revelation" or "scientific hunch." It is exemplified by the remarkable revelation or hunch of Dr. Loewi. We would like to discuss the scientific hunch first.

## Scientific Hunch

Platt and Baker[6] in a thought-provoking article defined a "scientific hunch" as a unifying idea which springs into consciousness suddenly as a solution to a problem in which one is intensely interested. In typical cases, it follows a long study but comes into consciousness at a time when one is not consciously working on the problem. A hunch springs from a wide knowledge of facts but is essentially a leap of the imagination in that it goes beyond a mere necessary conclusion which any reasonable man must draw from the data at hand. It is a process of creative thought." Put more concisely, a hunch or an intuition is a judgment, the bases or premises of which are unknown or not clear to the individual having the hunch.

An additional example should suffice to illustrate the scientific hunch or revelation. For years, through intense and unremitting observation, Charles Darwin, the great English naturalist, had been accumulating masses of facts which pointed to a momentous conclusion. But they pointed through a maze of baffling inconsistencies. Then suddenly the revelation came! Darwin described it this way, "I can remember the very spot on the road, whilst in my carriage, when to my joy, the solution occurred to me."[7] Then, and only then, did the great statement of the theory of evolution occur.

It seems clear that a scientific hunch or revelation requires a prepared mind; one that is completely saturated with seeking the answer to a problem. It seems to occur during rest or a period of quiet or reverie. The apparent solution, or the proper method of attack, of a problem comes to mind when the individual is not

working on the problem and has no data before him. The solution springs to the conscious mind as if the trap door of the unconscious mind had just been opened.

We may wonder how frequently scientists experience the scientific hunch or scientific revelation. Platt and Baker circulated a questionnaire to 1,450 scientists in 1931. Two hundred of these were directors of research laboratories while the remainder was selected from *"American Men of Science"* and included mostly chemists but also a number of physicists, mathematicians, biologists and psychologists. Of these 232 responded. Platt and Baker found that 33% of the respondents reported that they experienced the hunch frequently; 50% occasionally while 17% reported they had never experienced it. Platt and Baker believe that the individuals most likely to experience the scientific hunch are those who start with a working hypothesis and then accumulate data to test it. These individuals are termed "Guessors" by Platt and Baker. The second types, who may be less likely to experience the scienfitic hunch, are called "Accumulators." These individuals gather facts and masses of data which are expected eventually to direct the way to an answer. While this classification may be correct, it seems fair to say that there is no solid evidence at present to support it.

## Serendipity

A flash of genius or a lucky experience may also take a second form. We would like to call this type "Serendipity." This word was coined in 1754 by Horace Walpole, the English author, art critic and sometime politician. He is remembered best for his vivid and tremendous correspondence. His brilliant letters inspired by an observing eye and a keen mind constitute a broad and lively account of the social, cultural, and political scenes of his time. Walpole's letter of January 28, 1754 to Horace Mann who was then residing in Florence, Italy, contains the first reference to serendipity. It is not commonly found in dictionaries and even Webster's 3rd International Dictionary does not have the definition complete. Walter Cannon tells of trying out the word on a friend who had never before heard of it. When asked what he thought the meaning might be, the reply was that it probably designated a mental state combining serenity and stupidity!

Walpole's proposal was coined after reading a fairy tale entitled "The Three Princes of Serendip."[8] Serendip is an ancient word for Ceylon. Walpole, discussing a happy accidental observation he had made, compared it with the theme of the fairy tale. "As their highnesses traveled, they were always making discoveries, by accident or sagacity, of things they were not in quest of." Walpole further states in his letter that "No discovery of a thing you *are* looking for comes under this description." We would like to emphasize the importance of *accident* and *sagacity* in this definition as well as the fact that the discovery or *revelation* comes when one is not looking for it specifically. In this definition we equate sagacity with a prepared mind and discovery with a leap of the imagination which occurs as a result of an external clue or cue.

The definition of serendipity in Webster's 3rd International Dictionary does not indicate the importance of sagacity and reflects only the prevalent belief that "Accidental Discovery" is a synonym for serendipity.[9,11] Finding a hundred dollar bill on the floor is an accidental discovery but it is not an example of serendipity.

We have already mentioned an example of serendipity: that of Sir Alexander Fleming and the discovery of the antibacterial effect of the penicillium mold. Another example of serendipity is the famous discovery of the principle of specific gravity by Archimedes. Archimedes was a mathematician and inventor who was born in Syracuse in Sicily in 287 B.C. He was on intimate terms with, if not related to Hieron, the King of Syracuse. The King had a crown of pure gold made for himself. King Hieron, wishing to test the honesty of the goldsmith, gave Archimedes the problem of determining whether, indeed, the crown had been made of pure gold. Archimedes wrestled with the problem for a considerable period of time without success. One day, as he was stepping into his bath, he recognized the significance of the displacement of water by his own body. If the crown was of pure gold and was compared with an equal weight of pure gold, they should displace equal volumes of water. "Eureka — I have found it!" shouted Archimedes as he ran through the streets of Syracuse, directly from his bath and covered only by a smile of satisfaction! How many people before Archimedes must have stepped into a bath and observed the water rise in their bathtubs? Why had none thought of this before?

The two types of "flashes of genius" which have been discussed, that is, the scientific hunch and serendipity, have several things in common. They require a prepared mind. They result in solutions to problems that may range from the reordering of facts into theory to suggesting experimental or other approaches to testing hypotheses. They are somewhat different in that the individual having the hunch is not working directly on the problem with which he or she is concerned and the revelation usually comes during a period of quiet, during rest at night, while walking, etc. Such may also be the case with the serendipitous observation but it may also occur when the individual is at work on the problem. The main difference between the hunch and serendipity is that the hunch requires no

external cue or clue. The solution seems to come from the unconscious to consciousness in a flash as we saw in the cases of Dr. Lowei and Charles Darwin. In contrast, the serendipitous finding is one which requires an external cue or clue as in the cases of Sir Alexander Fleming and Archimedes. There are other well known examples of serendipity. Thus, a boiling tea kettle provided James Watt the clue he needed to develop the steam engine. A falling apple provided the clue for Sir Isaac Newton's expression of the universal law of gravitation.

Hunches and serendipity are vastly different from solutions arrived at by trial and error, by a continuing and random testing of this or that chemical or material to determine its effect on a reaction or process. However, it should be emphasized that important discoveries have also been made in this way but the contrast is striking. Dr. Paul Ehrlich, a German bacteriologist, was interested in finding a cure for the disease, mal de Caderas, induced by trypanosomes and afflicting the hind quarters of horses.[12,13] Ehrlich knew that arsenic combined into an organic molecule called atoxyl had been used to treat African sleeping sickness, a disease also induced by trypanosomes. Although the compound was toxic to trypanosomes, a distressing number of patients became blind after treatment. Ehrlich set out to improve atoxyl by synthesizing and testing compound after compound containing arsenic. After trying 605 different arsenical compounds and nearly eight years of testing, the 606th compound, arsphenamine, proved to be lethal to trypanosomes and well tolerated by horses. On the basis of incorrect information supplied by Fritz Schandinn that the syphilis-causing microbe, *Spirocheta pallida*, "may sometimes turn into trypanosomes," Ehrlich tried arsphenamine on rabbits in which syphilis had been induced experimentally. To his delight, compound 606 was also lethal to the spirochetes inducing syphilis and well tolerated by the rabbit. This compound was later tried successfully in humans afflicted with syphilis and remained the major therapy for this disease until 1943 when it was replaced by penicillin.

Those most likely to experience hunches and serendipity are creative people. Such persons have been characterized by A.B. Garrett[1] as intellectually curious, flexible individuals who recognize problems and define them clearly. They can put information together in several ways; they seek recognition and praise. They are anti-authoritarian and unorthodox and mentally restless. They are intense, strongly motivated, highly intelligent and are goal, but not method, oriented. They probably show these characteristics early in life. None of these characteristics seems to be adequate to identify the creative person, but all together, they give a profile which may be useful.

Questions may be raised as to how creativity can be stimulated and how conditions can be altered to make possible new discoveries. Those scientists who answered the questionnaire of Platt and Baker[6] seemed in virtual agreement only about conditions that were unfavorable to creativity; such as, mental and physicial fatigue, petty irritations, noise, worry over domestic or financial matters, depression and anger. The one thing most detrimental is interruption or the feeling that one might be interrupted at any time. This was stressed in the replies again and again. With such a feeling it is impossible to relax and let the constructive portion of the mind have full sway.

This then brings us full circle back to the comment of our colleague, "Luck is sometimes better than good planning." If the lucky event happens to be either a scientific hunch or a serendipitous observation, it could be better than one's best planning!

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**Wisdom is knowing what to do next.**
**Skill is knowing how to do it,**
**Virtue is doing it.**

# Are local pharmacists refusing to fill your valid $R_x$ for a rational, legal drug?

# The answer may make you fighting mad.

The American medical system has traditionally rested upon two logical premises: first, that licensed physicians have satisfactorily proven their competence to treat patients and, second, that FDA-approved drugs have proven *their* favorable risk-to-benefit ratio before they are ever offered for general distribution.

Another cornerstone of our system has been that once a licensed physician prescribes an approved drug, he has the absolute right to expect retail pharmacists to honor it. And to do so without belittling or impugning his competence, ethics, or sense of responsibility.

For the most part, this system has worked fine. But it may be on the verge of breaking down, as you will see from the letter reproduced in full on the facing page. It was written by a man who is himself in a health-care-related field, but when he wrote us, he was speaking as a patient—a very concerned, disappointed patient. The disturbing question he raises is simply this: have Florida's pharmacists the right—or the professional competence—to set themselves above the doctors of their communities to act as an informal but highly effective peer review committee, passing judgement on the propriety of your $R_x$ before they will deign to fill it? From this letter, it appears that many of the state's druggists have assumed precisely this prerogative.

After you read the letter, we think—we *hope*—you'll be fighting mad. This is far more than a question of one drug manufacturer wanting to sell its products. The real issue is that if retail pharmacists can refuse to dispense Quāālude® (methaqualone) today, what's to stop them tomorrow from refusing—by the same tortured logic—to dispense benzodiazepines? Or barbiturates—both of which, incidentally, have been reported to be abused to a greater degree than has Quāālude.®*

The real question is: who shall decide what prescription is or is not appropriate for a patient? Until now no one has questioned the attending physician's absolute responsibility in this regard. We think this is how it should remain.

How do you feel about it?

We invite you to speak out...with letters to your local medical society, to your retail pharmacists and their professional groups, to your legislators, if need be.

Surely not for our sake, much as we would welcome it.

Not even, in all candor, for yours.

But for your patients... and their own inalienable right to have decisions regarding their health and well-being made by the one person who is best qualified to do so.

Their doctor.

*Drug Abuse Warning Network data through November 1978, from the Drug Enforcement Administration, Department of Justice.

***Please see following page for brief summary of prescribing information, including warnings, contraindications, and dosages.***

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Elliott Fisher, Esq.
General Counsel
Lemmon Company
P.O. Box 30
Sellersville, PA 18960

January 11, 1979

Re: Quāālude problem

Dear Mr. Fisher,

I have a long-standing sleep disorder which at one time or another has been treated by just about every medication indicated. Two or three years ago my physician prescribed Quāālude.® Finally, we had established a medication which worked for me and did not produce various undesirable side effects.

I am aware, certainly, of the abuse of this agent, but until recently this deplorable situation had no direct effect upon me. However, over the past year, I have been drawn into more personal involvement since, every two months, while trying to have my prescription filled, I have found that:

1) I must visit as many as five stores before finding one that stocks the product;
2) I am treated with disdain, to say the least, and made to feel that I am being regarded as a criminal trying to pass a forged prescription;
3) Having finally located a store with stock, I am obliged to pay 62.5% more per tablet than I ever paid before because, as the pharmacist says, "If I have to put up with all the paperwork, hassle, and the like--it's not worth it to stock the drug unless I get <u>my</u> price."

I must presume that pressures are being exerted upon pharmacists to boycott this product. Now, I have become involved since this situation infringes upon my <u>civil rights--my right to have my physician's orders and proper prescription filled.</u> Judging by the way things appear to be headed, in time I will probably not be able to get my prescription filled at all.

Realizing that this situation will almost certainly become worse with time, and that there appears to be no relief at this local level, I must look to your company to help in solving the problem. I know that your problems are complicated and multiplied by the numbers of patients in this country who, like me, face a similar situation. While I do not ordinarily pose as a champion of causes, I am angry enough to stand up and be counted before another of my rights slips away because of prejudice, fear, and/or intimidation.

Please tell me what, if anything, I can do to help prevent the eventual disappearance of an excellent and worthy pharmaceutical agent. I will do anything I can, both as a consumer and as a concerned citizen.

You may feel free to quote me, by name, in your efforts to preserve this good and valuable product. I look forward to the opportunity of doing <u>whatever</u> I can to help.

Sincerely,

Ronald K. Ruder
Vice President

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# Quāālude®-300 (methaqualone)

300 mg tablets

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**Usual Adult Dose:** 150-300 mg. at bedtime.
**Overdosage:** Recommended management includes prompt evacuation of gastric contents, maintenance of adequate ventilation, support of blood pressure if necessary, and the usual supportive measures for the unconscious patient. Dialysis may be helpful. Analeptics are contraindicated.
**Contraindications:** Contraindicated in patients with known hypersensitivity to methaqualone, and in women who are or may become pregnant.
**Warnings:** The hypnotic dose should be taken only at bedtime immediately before the patient retires. Not recommended for use in children. The patient on Quāālude® must be warned against driving a car or operating dangerous machinery while on the drug. The patient should be warned about the possible additive effects of Quāālude® when administered with other sedative, analgesic or psychotropic drugs, or alcohol. Pending longer term clinical experience, Quāālude® should not be used continuously for periods exceeding three months. Illicit use of methaqualone or abuse of the drug for non-therapeutic purposes may lead to severe psychological or physical dependence. Caution must be exercised in administering methaqualone to individuals known to be addiction-prone or those whose history suggests they may increase the dosage on their own initiative.
**Precautions:** The possibility of the use of sedative-hypnotic drugs in suicide attempts should be kept in mind and the drugs prescribed in small quantities. Since methaqualone is metabolized in the liver, it should be given in reduced doses, if at all, to those with impaired hepatic function.
**Adverse Reactions:** *Neuropsychiatric*—headache, hangover, fatigue, dizziness, torpor, transient paresthesia of the extremities; occasional restlessness or anxiety, peripheral neuropathy has been reported. *Hematologic*—aplastic anemia possibly related to methaqualone has been reported *Gastrointestinal*—dry mouth, anorexia, nausea, emesis, epigastric discomfort, diarrhea. *Dermatologic*—diaphoresis, bromhidrosis, exanthema, urticaria has been particularly well documented
**How supplied:** Quāālude®-150 (methaqualone) white scored tablets containing 150 mg. methaqualone. Quāālude®-300 white scored tablets containing 300 mg. methaqualone.
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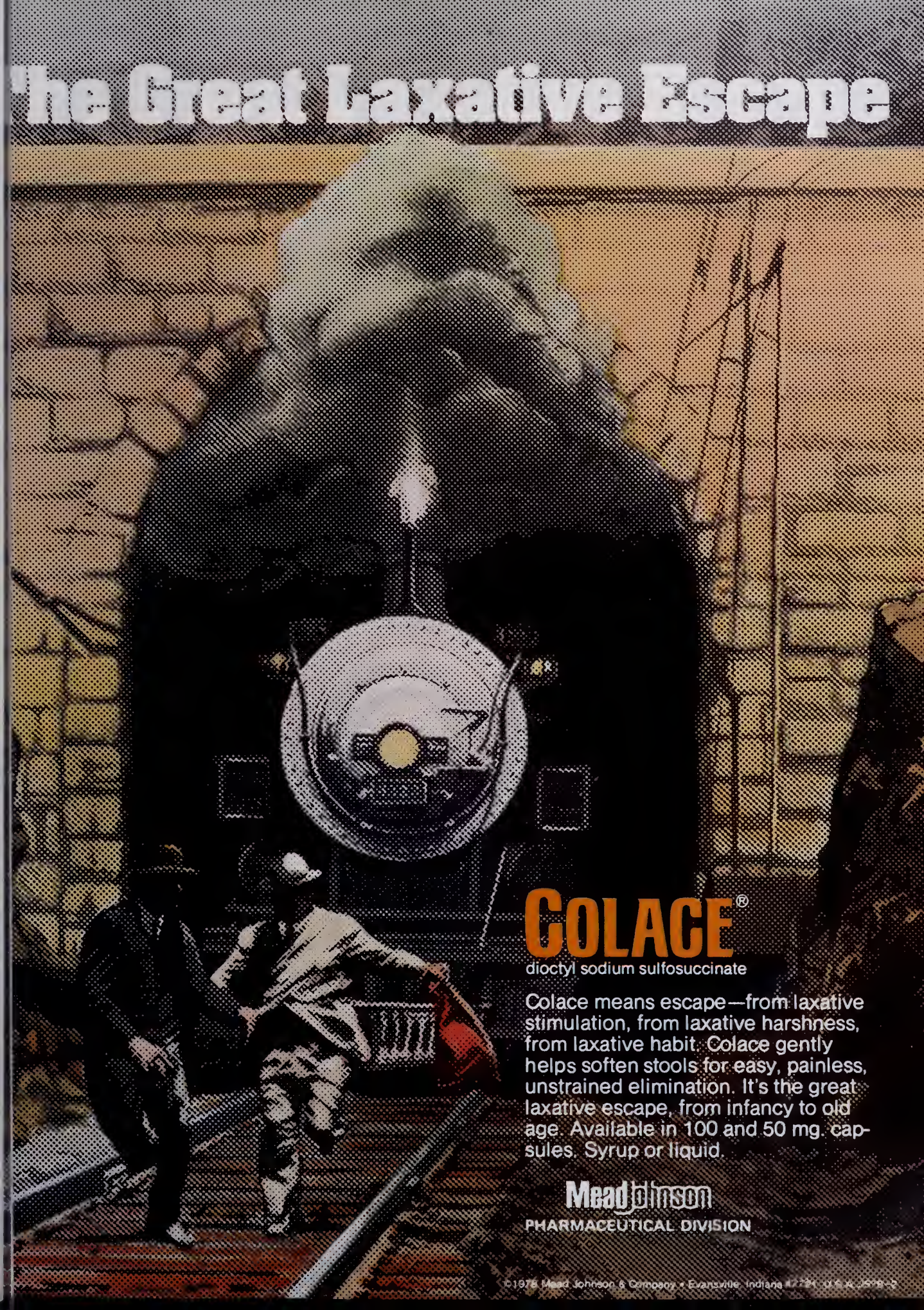
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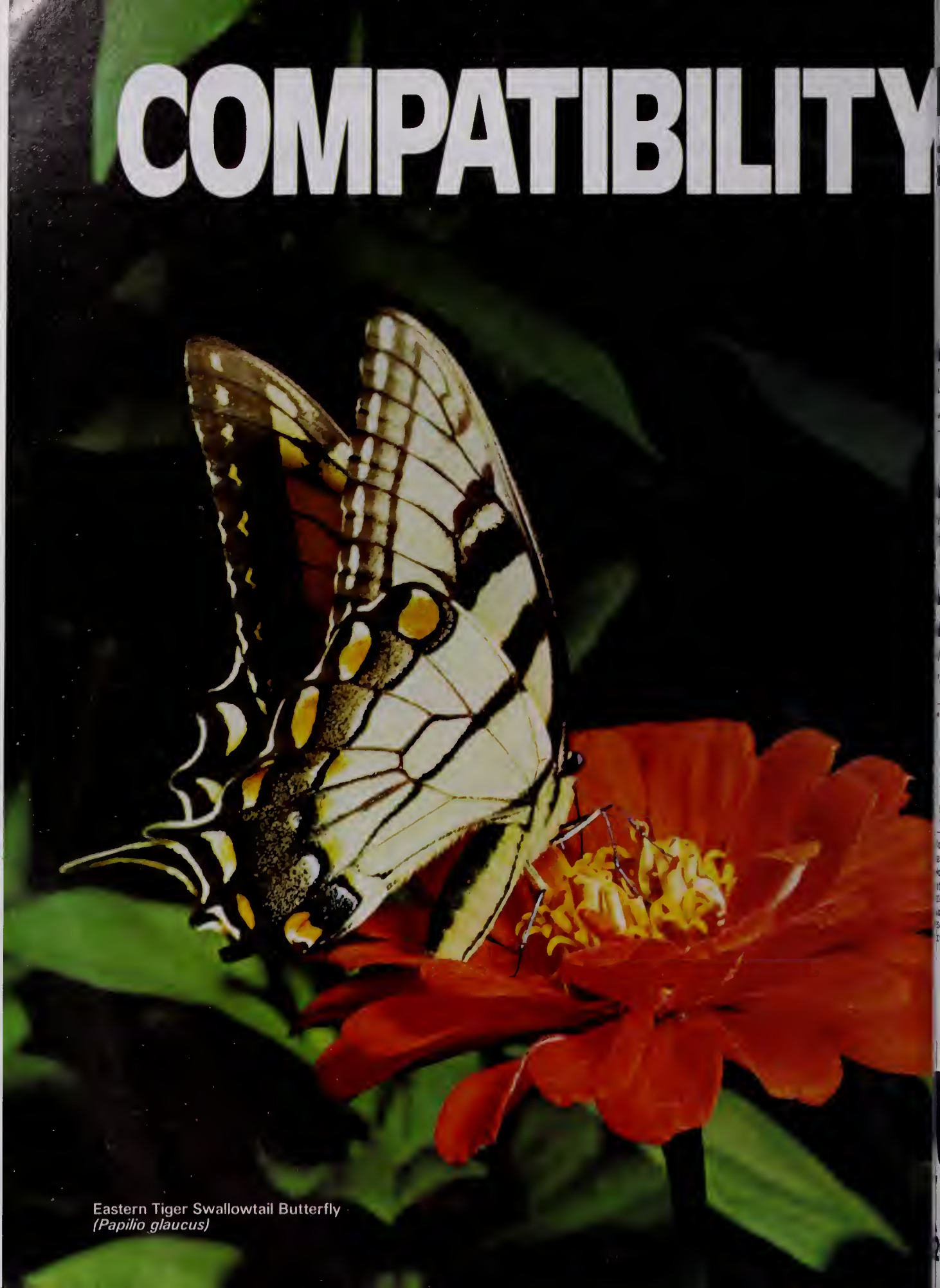

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Vasodilan can be a valuable adjunct in planning a total therapeutic program for vascular insufficiency.

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Possibly Effective:
1. For the relief of symptoms associated with cerebral vascular insufficiency.
2. In peripheral vascular disease of arteriosclerosis obliterans, thromboangiitis obliterans (Buerger's Disease) and Raynaud's disease.
Final classification of the less-than-effective indications requires further investigation.

**Composition:** Vasodilan tablets, isoxsuprine HCl, 10 mg. and 20 mg.
Vasodilan injection, isoxsuprine HCl, 5 mg., per ml.
**Dosage and Administration:** Oral: 10 to 20 mg., three or four times daily.
Intramuscular: 5 to 10 mg. (1 or 2 ml.) two or three times daily. Intramuscular administration may be used initially in severe or acute conditions.
**Contraindications and Cautions:** There are no known contraindications to oral use when administered in recommended doses. Should not be given immediately postpartum or in the presence of arterial bleeding.

Parenteral administration is not recommended in the presence of hypotension or tachycardia.
Intravenous administration should not be given because of increased likelihood of side effects.
**Adverse Reactions:** On rare occasions oral administration of the drug has been associated in time with the occurrence of hypotension, tachycardia, nausea, vomiting, dizziness, abdominal distress, and severe rash. If rash appears the drug should be discontinued.
Although available evidence suggests a temporal association of these reactions with isoxsuprine, a causal relationship can be neither confirmed nor refuted.
Administration of single dose of 10 mg. intramuscularly may result in hypotension and tachycardia. These symptoms are more pronounced in higher doses. For these reasons single intramuscular doses exceeding 10 mg. are not recommended. Repeated administration of 5 to 10 mg. intramuscularly at suitable intervals may be employed.
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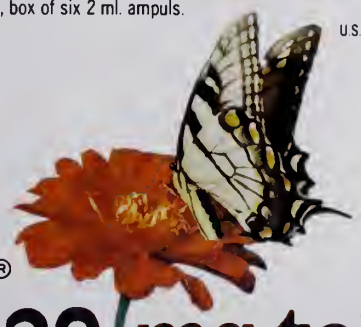

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Warnings: Do not administer more frequently than every 6 hours, or within 12 hours after rectal dose of any preparation containing theophylline or aminophylline. Do not give other compounds containing xanthine derivatives concurrently.

Precautions: Use with caution in patients with cardiac disease, hepatic or renal impairment. Concurrent administration with certain antibiotics, i.e., clindamycin, erythromycin, troleandomycin, may result in higher serum levels of theophylline. Plasma prothrombin and factor V may increase, but any clinical effect is likely to be small. Metabolites of guaifenesin may contribute to increased urinary 5-hydroxyindoleacetic acid readings, when determined with nitrosonaphthol reagent. Safe use in pregnancy has not been established. Use in case of pregnancy only when clearly needed.

Adverse Reactions: Theophylline may exert some stimulating effect on the central nervous system. Its administration may cause local irritation of the gastric mucosa, with possible gastric discomfort, nausea, and vomiting. The frequency of adverse reactions is related to the serum theophylline level and is not usually a problem at serum theophylline levels below 20 mcg/ml.

How Supplied: Capsules in bottles of 100 and 1000 and unit-dose packs of 100; Liquid in bottles of 1 pint and 1 gallon.

*See package insert for complete prescribing information.*

**Mead Johnson**

PHARMACEUTICAL DIVISION

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# EDITORIALS

## A Distinguished Alumnus Among Us

Dr. Palmer

There is something unique and remarkable about Florida's medical family Palmer. Its tradition of service to mankind and to organized medicine parallels — even predates — the history of the Florida Medical Association.

Indeed, over the years the family has furnished the FMA with three of its presidents, beginning with Dr. Thomas M. Palmer back in 1876. In 1909, Dr. Henry E. Palmer assumed that office, followed in 1966 by Henry's son, Dr. George S. Palmer.

When the University of Florida honors George Palmer this month with its Distinguished Alumnus award (see story elsewhere in this issue of *The Journal*) it will in a sense be saluting the entire Palmer family. The Palmer traits of love, devotion, loyalty and dedication are personified to this very day by George Palmer and members of his family.

The 1970s have not been easy years for George Saxon Palmer. As Executive Director of the Florida State Board of Medical Examiners for more than a decade, he has been a high profile figure in state government.

He has been a target of media editorialists, legislators and other critics of Florida's system of medical licensure and discipline.

To his credit, he has endured all the broadsides with unflinching grace and dignity, always maintaining the posture of a true gentleman.

Whatever the future holds for George Palmer, he will be remembered by thousands of physicians and laymen alike as a decent and honorable man, who has made valuable and enduring contributions to his profession and to his native state.

And to George Palmer, a Distinguished Alumnus of the University of Florida, the editors of *The Journal* offer their felicitations and gratitude for his many years of good works.

# University of Florida Student Joins Journal Editorial Staff

Mr. Steven J. Westgate, a fourth-year medical student at the University of Florida in Gainesville, has joined the staff of *The Journal of the Florida Medical Association* as a Consulting Editor.

A member of the Alachua County Medical Society and the Florida Medical Association, Mr. Westgate is a native of Minneapolis who moved to Florida in 1964. He attended high school at Delray Beach, Fla., graduating in 1971.

Mr. Westgate earned a B.A. degree in religion and zoology from Duke University magna cum laude in 1975. He worked for a year at Duke University Medical Center before entering medical school in Florida.

Backpacking, racquetball and running are among his favorite recreational pursuits. He eventually intends to become an internist or family physician.

Mr. Westgate takes the place of Jerrold A. Van Dyke, who is moving to St. Louis for residency training following receipt of his medical degree this spring.

Mr. Westgate

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# Most University of Miami Graduates Get Residency Choice

About 78% of the students in the University of Miami School of Medicine's 1979 graduating class got one of their three top choices of graduate training programs in the internship-residency matching.

The School turned out 165 new M.D.'s and 69 opted for careers in Internal Medicine. Surigical programs attracted 23 graduates.

Other specialties selected included: Family Practice, 16; Pediatrics, 12; Anesthesiology, 9; Obstetrics and Gynecology, 8; Pathology and Psychiatry, 5 each; and Radiology, 4. Twelve graduates apparently have not made up their minds.

Fifty-four graduates chose to remain in Florida for further training. Nineteen are going to California and 15 to New York.

# Generics save money. Big money!

The FTC estimates that $400 million could be saved annually on the nation's Rx bill if physicians prescribed generics. Are you saving *your* patients extra dollars?

Purepac, America's leading manufacturer of a national brand of generics, would like to show you the tremendous savings possible with just three of our 700 generic products:

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| Pavabid Capsules* | 150 mg. | $10.32 | | |
| Purepac Papaverine | 150 mg. | 3.95 | **$6.37** | 61.7% |
| Equanil Tablets* | 400 mg. | 8.15 | | |
| Purepac Meprobamate | 400 mg. | 1.85 | **6.30** | 77.3% |
| Librium Capsules* | 10 mg. | 8.76 | | |
| Purepac Chlordiazepoxide HCl. | 10 mg. | 3.90 | **4.86** | 55.4% |

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Purepac generics save money. Big money. Purepac is dedicated to providing your patients with quality products that are equivalent to their brand name counterparts at significant savings.

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# The Maker

## Examining a Few Myths About Prescribing.

Increasing pressure is being put on the practicing physician to prescribe drugs generically. You are told that brand-name products are universally "expensive" and generic versions are relatively "cheap." To make this case, the most extreme (rather than typical) price differentials are cited. Thus, consumers are led to believe that such differentials are commonplace. Even your knowledge and your motives as a physician are questioned.

Understandably, these views have created myths. We think it's time to examine them in the light of all the facts and ramifications.

*MYTH: There are no differences in quality and performance between brand-name products and their generic counterparts. The corollary is that there are no differences among products made by high-technology, quality-conscious, research-based companies and those made by commodity-type suppliers.*

**FACT: The Food and Drug Administration does a good job in monitoring a generally excellent drug supply. Still, it has nowhere near the resources to guarantee the quality and bioavailability of all marketed products at any given time. Just a few months ago, for example, it noted that batches of tetracycline HCl capsules which met official monograph requirements were not bioequivalent to a reference product. As you know, there is substantial literature on this subject affecting many drugs, including such antibiotics as tetracycline and erythromycin. The record on drug recalls and court actions affirms strongly that there are differences among pharmaceutical companies and their products. Research-intensive companies have far better records than those that do no research and may practice minimum quality assurance.**

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*MYTH: Industry favors only "expensive" brand names and denigrates all generics.*

**FACT: PMA companies make 90 to 95 percent of the drug supply, including, therefore, most of the generics. Drug nomenclature is not the important point; it's the competence of the manufacturer and the integrity of the product that count.**

# Matters.

*MYTH: Generic options almost always exist.*

**FACT: About 55 percent of prescription drug expenditure is for single-source drugs. This means, of course, that for only 45 percent of such expenditure, is a generic prescribing option available.**

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*MYTH: Generic prescriptions are filled with inexpensive generics, thus saving consumers large sums of money.*

**FACT: Market data show that you invariably prescribe—and pharmacists dispense—both brand and generically labeled products from known and trusted sources, in the best interest of patients. In most cases the patient receives a proven brand product. Savings from voluntary or mandated generic prescribing are grossly exaggerated.**

*MYTH: Drugs account for a major portion of the rise in health care costs.*

**FACT: Drugs represent a very small part of such costs. The amount of the health care dollar spent for prescription drugs was about 12 cents in 1967; today it is about 8 cents. And you as a physician are most conscious of how drug therapy can cut hospitalization, avert surgery, reduce office visits and keep patients on the job.**

---

*MYTH: Government intrusions into the marketplace will save tax money.*

**FACT: Government schemes always cost the taxpayer something, and the costs often exceed the benefits. Certainly, any federal "help," such as lists of wholesale drug prices sent to all physicians and pharmacists, will be no exception. Just think of the expense of keeping them current! Moreover, wholesale prices are poor guides to actual transaction prices and even worse guides to retail prices.**

## The PMA Position

We believe your freedom to prescribe, either by generic or brand name, should be totally unabridged. Otherwise, your prescribing prerogatives and your relationships with patients will be seriously impaired.

## The maker does matter

After the myths about price and equivalency have been shattered, one fact stands out more clearly than ever: *The maker does matter.* As always, your best guide to drug therapy for your patients is to select products—both brands and generics—from manufacturers with credentials and performance records you have come to respect.

PMA

Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D.C. 20005

# ORGANIZATION

Richard S. Hodes, M.D.

# Richard Samuel Hodes, M.D.

FMA President-elect Richard S. Hodes, M.D., was reared in Florida and attended public schools here. After receiving a B.S. degree from Tulane University, he attended Tulane University Medical School and obtained his M.D. in 1946.

After completing an internship at the U.S. Marine Hospital and a residency at the University of Minnesota, Dr. Hodes began his practice of anesthesiology in the Tampa area in 1951. In the late 1950's he worked with a Bradenton surgeon at a veterinary hospital doing experimental surgery which lead to a widely published paper on Myocardial Revascularization. Later, as Chief Anesthesiologist at Tampa General Hospital, he established the only non-university anesthesia residency program in Florida.

Now serving his sixth term as State Representative in the Florida Legislature from the 68th Urban District of Tampa, Dr. Hodes was President of the Hillsborough County Medical Association in 1977-78, was past-president of the Florida Society of Anesthesiologists, has served on the Board of Trustees of the American Society of Anesthesiologists and is currently a member of the Florida Medical Association House of Delegates and Board of Governors.

Dr. Hodes has held appointment as Clinical Associate at the University of Florida College of Medicine and now holds a Clinical Professorship at the University of South Florida College of Medicine.

During his terms in public office Dr. Hodes has been instrumental in establishing a number of medically oriented programs including the establishment of the Tampa Mental Health Institute, the development of the Burn Center in Gainesville, passage of legislation for the Community Hospital Education Act and aiding in securing funds to expand the medical education facilities in Gainesville and the establishment and funding of the School of Dentistry in Gainesville. Along with the Hillsborough Delegation, Dr. Hodes assisted in the establishment of the University of South Florida College of Medicine.

Dr. Hodes was awarded the State Jaycee Good Government Award, the Outstanding Service Award of the Voluntary Health Association, an award for outstanding legislative contribution in the area of retardation by the Florida Association for Retarded Children, and was twice a finalist for the most valuable legislator award presented by the St. Petersburg Times and the Capitol Press Corps. In 1975, Dr. Hodes received the A.H. Robins Community Service Award for outstanding services by a physician.

Currently Dr. Hodes serves as Treasurer of Professional Insurance Management Company (PIMCO) and Vice President of the National Conference of State Legislators of which he will become President in July, 1980.

Married to the Former Marjorie Cohen, Dr. Hodes and his wife have one daughter, Marilyn, and reside in Tampa.

Thomas E. McKell, M.D.
Tampa

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**In the battle for existence, talent is the punch, and tact is the clever footwork.**

**Wilson Mizner**

# Dr. George S. Palmer Receives University of Florida Distinguished Alumnus Award

George Saxon Palmer, M.D., FMA's President in 1966-67, received the University of Florida's "Distinguished Alumnus" award on June 9.

The honor is reserved for individuals who have excelled in their chosen fields and have demonstrated devotion to the University of Florida, bringing honor and prestige upon the University. Recipients are proposed by a university-wide Committee on Honorary Degrees, Distinguished Alumnus Award and Memorials.

Dr. Palmer, a lifelong resident of Tallahassee and Executive Director of the Florida State Board of Medical Examiners received the award at spring quarter commencement exercises from UF President Robert Q. Marston, M.D.

Dr. Palmer entered the University of Florida in 1933 following graduation from Tallahassee's Leon High School. Four years later he received a B.S. degree. He received his medical degree from Johns Hopkins in 1943.

He is a member of a family that has been active in the Florida Medical Association for more than 100 years. His great uncle, Thomas M. Palmer, M.D., of Monticello, in 1876 was the second President of the FMA, and his father, Henry E. Palmer, M.D., followed in that office in 1909.

During World War II, Dr. Palmer served in the U.S. Army Medical Corps with Gen. George Patton's Third Army. After his discharge as a Major, he opened a pediatric practice in Tallahassee in 1948. He retired from practice in 1969 when he became the fulltime Director of the Board of Medical Examiners, a position that he had held previously on a parttime basis for two years.

Prior to that, he had been a member of the Board of Medical Examiners and served one year as its President. In the field of medical licensure and discipline he has risen to the office of President of the Federation of State Medical Boards of the United States, Inc.

Dr. Palmer's numerous professional activities have included the presidency of the Capital Medical Society, Vice President of Blue Shield of Florida, a member of the FMA Board of Governors, and member of the FMA Judicial Council.

In his specialty, he is a member of the Florida Pediatric Society, a Diplomate of the American Board of Pediatrics and a Fellow of the American Academy of Pediatrics.

He has served on the Governor's Advisory Board on Medicine (1967-71), the Governor's Advisory Board on Education (1971-73), the Health Planning Council of North Florida, the Advisory Board of Operation Head Start (1969-73), and the Founding Committee of Funders, Inc., of Tallahassee. The latter is a program providing summer camping for underprivileged children.

Dr. Palmer and his wife of 36 years, the former Marie Margaret O'Leary, are the parents of two sons and three daughters.

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**An idealist believes the short run doesn't count.**
**A cynic believes the long run doesn't matter.**
**A realist believes that what is done or left undone in the short run determines the long run.**

**Sydney J. Harris**

# n Edema* or Hypertension* when potassium balance is a concern...

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The triamterene in 'Dyazide' limits potassium loss and provides an ditive diuretic effect to that of the hydrochlorothiazide component.

**Hypertension**

As the hydrochlorothiazide in 'Dyazide' lowers blood pressure, the amterene component limits potassium loss.

**erum $K^+$ and BUN should be checked periodically**

rticularly in the elderly, diabetics, and those with suspected or confirmed nal insufficiency (see Warnings). If hyperkalemia develops, substitute a azide alone.

**Before prescribing, see complete prescribing information in SK&F Co. literature or *PDR*. A brief summary follows:**

* **WARNING**
This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

**Contraindications:** Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

**Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired.** If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum $K^+$ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict $K^+$ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

**Precautions:** Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spironolactone is used concomitantly, determine serum $K^+$ frequently; both can cause $K^+$ retention and elevated serum $K^+$. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effect may be enhanced in postsympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine.

**Adverse Reactions:** Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

**Supplied:** Bottles of 100 and 1000 capsules; Single Unit Packages of 100 (intended for institutional use only).

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a SmithKline company

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Carolina, P.R. 00630

When painful spasm is the presenting symptom...

...in the functional bowel/irritable bowel syndrome*

# Bentyl®

## (dicyclomine hydrochloride USP)

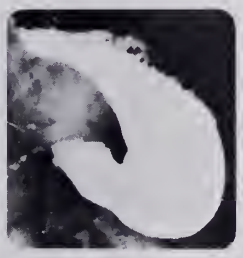
10 mg. capsules, 20 mg. tablets,
10 mg./5 ml. syrup, 10 mg./ml. injection

helps control abnormal motor activity
with minimal anticholinergic side effects†

Demonstrated smooth muscle relaxant activity.

In this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

. . . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.



Pylorospasm has almost totally blocked passage of barium meal.

Barium meal beginning to pass 10 minutes after intramuscular injection of 20 mg. Bentyl.

*"The correlation of spasm relief and drug given was excellent."*

*This drug has been classified "probably" effective in treating functional bowel/irritable bowel syndrome.

†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:
King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

**Merrell**

B-4420 (Y736A) MNR-804

# Bentyl®

## (dicyclomine hydrochloride USP)

Capsules, Tablets, Syrup, Injection

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATIONS
Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the following indications as "probably" effective:

For the treatment of functional bowel/irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

CONTRAINDICATIONS. Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient, unstable cardiovascular status in acute hemorrhage; severe ulcerative colitis; toxic megacolon complicating ulcerative colitis; myasthenia gravis. WARNINGS: In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. PRECAUTIONS: Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with. Autonomic neuropathy. Hepatic or renal disease. Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon. Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. ADVERSE REACTIONS: Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention; blurred vision and tachycardia; palpitations; mydriasis; cycloplegia; increased ocular tension; loss of taste; headache; nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. DOSAGE AND ADMINISTRATION: Dosage must be adjusted to individual patient's needs.

*Usual Dosage*: Bentyl 10 mg. capsule and syrup: *Adults*: 1 or 2 capsules or teaspoonfuls syrup three or four times daily. *Children*. 1 capsule or teaspoonful syrup three or four times daily. *Infants*. ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg.: *Adults*: 1 tablet three or four times daily. Bentyl Injection: *Adults*: 2 ml. (20 mg.) every four to six hours intramuscularly only. NOT FOR INTRAVENOUS USE. MANAGEMENT OF OVERDOSE: The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used it Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine* (bethanecol chloride USP) should be used.

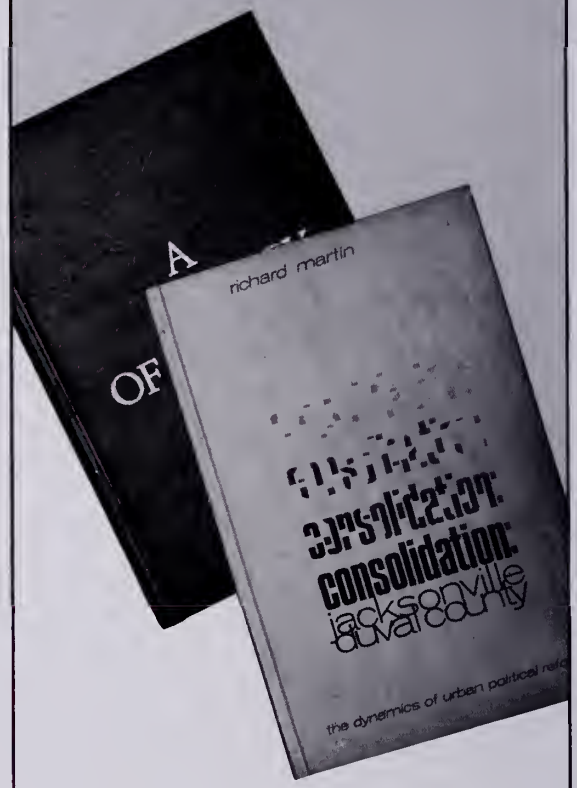
Product Information as of October, 1978.

Injectable dosage forms manufactured by CONNAUGHT LABORATORIES, INC., Swiftwater, Pennsylvania 18370 or TAYLOR PHARMACAL COMPANY, Decatur, Illinois 62525 for MERRELL-NATIONAL LABORATORIES, Division of Richardson-Merrell Inc., Cincinnati, Ohio 45215, U.S.A

**Merrell**

MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc
Cincinnati, Ohio 45215, U.S.A



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# Book Reviews

**Book Review Editor**

**F. Norman Vickers, M.D.**

**Annual Review of Neuroscience** by W. Maxwell Cowan, Zach W. Hall, Eric R. Kandel, and 28 contributing authors. Illustrated. 506 pages. Price $17.00. Annual Reviews, Palo Alto, California, 1978.

The authors point out recent tremendous growth in neurophysiology, neuroanatomy, neurochemistry, and physiological psychology. Coordination of these classic fields together with neuroembryology, neurobiology, neuropathology, neuro-oncology, neuroradiology and neurovascular disorders has led to interdisciplinary approaches by formation of departments of neuroscience in several medical schools.

Study of the nervous system represents one of the great intellectual challenges of our time. For example, the authors refer to analysis of gene expression in neurons, study of long term consequences of synaptic activity, together with elucidation of molecular structure of neuronal membranes; and, their associated ion channels and receptors which promise much for future contribution to medicine by neurological sciences in opening up new fields for investigation. Continued extensive reporting in symposia and lectures has led to remarkable growth of the Society for Neuroscience in North America.

The contents consist of valuable presentations by selected authors, authorities in their fields, who discuss topics of technical, clinical and basic interest. Included among subjects of more general interest are Neural Control of Behavior, Motor systems relating to Control of Locomotion. Pain, Sensory Evoked Potentials in Clinical Disorders of the Nervous System, Recent Advances in Neuroanatomical Methodology, Trophic Mechanisms in the Peripheral Nervous System, and Auditory Mechanisms of the Lower Brainstem.

In summary, those in clinical, technical or basic science pursuits will be rewarded by detailed perusal of this significant contribution to the neurosciences.

F. Stanley Morest, M.D.
Stuart

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Dr. Morest practices Neurovascular Disorders of the Extremities. He is a fellow of the American College of Physicians and the American College of Cardiology.

**Webster's Medical Office Handbook,** Anne H. Soukhanov, Ed. 596 pages. Price $10.95. G. & C. Merriam Company, Springfield, Massachusetts, 1979.

A text and reference book for the office assistant is essential. I believe that this multi-author book meets that need. This book could easily be used as a college text or as reference for the busy assistant already employed. A bibliography is included. A list of medical abbreviations, weights and measures with conversion factors is also included.

Chapters on billing and collecting, medical ethics, insurance claims and job descriptions are part of the text. Considerable space is devoted to written medical communications.

As a single reference for the medical assistant, this is as good as I've seen. She can put it alongside the medical dictionary.

F.N.V.

**Salesman Surgeon** by William McKay as told by Maurene Mylander. 187 pages. Price $9.95. McGraw-Hill, New York, 1978.

A machiavellian story of an orthopedic equipment salesman who went all out for his job. Most of us know the essential story through the news and medical press. McKay tells his story to Ms. Mylander, a medical writer. It makes interesting reading as a yarn but how do I know McKay didn't embellish the book's details as he apparently did with his clients? How do I know this is not just another "selling job" by McKay? Maybe it should be required reading for medical equipment salesmen. A fast moving story where the doctors are either avaricious clods or super-heroes. There are better books.

F.N.V.

# Books Received

**Receipt of the following books is acknowledged. Medical readers interested in reviewing particular books are invited to address requests to the Book Review Editor. Following acceptance of a written review for publication, a reviewer may then retain the book reviewed for his personal or favorite library.**

**Pharmacological and Toxicological Perspective of Commonly Abused Drugs** by Darryl Inaba, Ph.D., E. Leong Way, Ph.D., Kenneth Blum, Ph.D. and Sidney H. Schnoll, M.D. 44 Pages. National Drug Abuse Center, Rosslyn, Virginia, 1978.

**Currents in Alcoholism, Biological, Biochemical, and Clinical Studies,** Edited by Frank A. Seixas, M.D. 601 Pages. Illustrated. Price $31.50. Grune & Stratton, Inc., New York, 1978.

**Controlling the Use of Therapeutic Drugs: An International Comparison** edited by William M. Wardell. 263 Pages. American Enterprise Institute for Public Policy Research, 1978.

**Directory of Pathology, Training Programs 1979-80** by the Intersociety Committee on Pathology Information, Inc. 470 Pages. Illustrated. Price $25.00. Geo. W. King, Co., Baltimore, 1978.

**Culture and Commitment, The New Relationships Between the Generations in the 1970's** by Margaret Mead. 177 Pages. Price $2.95. Anchor Press/Doubleday, Garden City, New York, 1978.

**Uses of Enzymes and Immobilized Enzymes** by Francis X. Hasselberger. 220 Pages. Price $14.95. Nelson-Hall Publishers, Chicago, 1978.

**The Chemistry of Human Behavior** by Herbert L. Meltzer, Ph.D. 261 Pages. Illustrated. Price $17.95 (cloth). Nelson-Hall Publishers, Chicago, 1979.

**The Brand-Name Carbo Calorie Diet** by Donald S. Mart. 367 Pages. Price $9.95. Doubleday & Company, Inc., Garden City, New York, 1979.

**Cry Babel, The Nightmare of Aphasia and a Courageous Woman's Struggle to Rebuild Her Life** by April O. Armstrong. 252 Pages. Price $8.95. Doubleday & Company, New York, 1979.

**Annual Review of Neuroscience** with 31 contributing authors. 555 Pages. Annual Reviews, Inc., Palo Alto, California, 1979.

**Norethindrone, The First Three Decades** edited by Mary Jean Pramik. 100 Pages. Syntex Laboratories, Palo Alto, California, 1978.

**Principles of Clinical Electrocardiography, 10th Edition** by Mervin J. Goldman, M.D. 415 Pages. Illustrated. Price $12.00. Lange Medical Publications, Los Altos, California, 1979.

**Botanical Dermatology** by John Mitchell, M.D. and Arthur Rook, M.D. 787 Pages. Price $39.50. Lea & Febiger, Philadelphia, Penn., 1979.

**Humanhood: Essays in Biomedical Ethics** by Joseph Fletcher. 204 Pages. Price $14.95 (cloth) $6.95 (paper). Prometheus Books, Buffalo, New York, 1979.

**Family Health in an Era of Stress** conducted by Yankelovich, Skelly and White, Inc. 192 Pages (plus packet). General Mills, Inc., Minneapolis, Minnesota, 1979.

**Correlative Neuroanatomy & Functional Neurology, 17th Edition,** by Joseph G. Chusid, M.D. 464 Pages. Illustrated. Price $12.00. Lange Medical Publications, Los Altos, California, 1979.


**Tenuate® ®**
(diethylpropion hydrochloride NF)

**Tenuate Dospan®**
(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION
Brief Summary
**INDICATION:** Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.
**CONTRAINDICATIONS:** Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).
**WARNINGS:** If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. *Drug Dependence:* Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy:* Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children:* Tenuate is not recommended for use in children under 12 years of age.
**PRECAUTIONS:** Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.
**ADVERSE REACTIONS:** *Cardiovascular:* Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System:* Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal:* Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic:* Urticaria, rash, ecchymosis, erythema. *Endocrine:* Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System:* Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous:* A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.
**DOSAGE AND ADMINISTRATION:** Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in midevening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.
**OVERDOSAGE:** Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976
MERRELL-NATIONAL LABORATORIES Inc.
Cayey, Puerto Rico 00633
*Direct Medical Inquiries to.*
MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.
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References: 1. Citations available on request — Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M.: A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

**Merrell**

8-3921 (Y587A)

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## (diethylpropion hydrochloride NF)
**75 mg. controlled-release tablets**

### A useful short-term adjunct in an indicated weight loss program.

Overweight patients in certain diagnostic categories often require strict obesity control. Diethylpropion hydrochloride has been reported useful in obese patients with hypertension, symptomatic cardiovascular disease, or diabetes. While it is not suggested that Tenuate in any way reduces these complications in the overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. (Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.)

### In uncomplicated obesity.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

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The anorexic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.[1] And the unique chemistry of Tenuate provides "...anorexic potency with minimal overt central nervous system or cardiovascular stimulation."[2] Compared with the amphetamines, diethylpropion has minimal potential for abuse.

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# MEETINGS

## Approved by the FMA Committee on Continuing Medical Education

### JULY

**Fifth International Cuban Medical Association Congress,** July 3-7, Americana Hotel, Bal Harbour. For information: Manuel Viamonte Jr., M.D., 213 Aragon Ave., Coral Gables 33134.

**Diagnostic Ultrasound,** July 11, Naples Community Hospital. For information: Lee Light, M.D., 850 Central Ave., Naples 33940.

**Coronary Disease, Exercise Testing, and Cardiac Rehabilitation,** July 13-15, Royal Plaza Hotel, Orlando. For information: Mr. Stephen E. Mattingly, IMEC, 64 Inverness Drive East, Englewood, Colorado 80112.

**Recent Developments in the Treatment of Epilepsy,** July 17, Doctors Hospital, Lake Worth. For information: Sherwin Isaacson, M.D., 518 North Federal Highway, Lake Worth 33460.

**The Electrophysiology, Diagnosis and Treatment of Arrhythmias & Blocks,** July 28-31, Edmonton, Alberta. For information: Henry J. L. Marriott, M.D., St. Anthony's Hospital, St. Petersburg 33705.

**Laparoscopy Course,** July 30-31, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th Street, Jacksonville 32209.

### AUGUST

**ECG Interpretation & Arrhythmia Management,** Aug. 17-19, Orlando Hyatt, Orlando. For information: William E. James, Ph.D., 64 Inverness Dr., E., Englewood, Colorado 80112.

**Laparoscopy Course,** Aug. 27-28, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th St., Jacksonville 32209.

### SEPTEMBER

**17th Annual Seminar in Cardiology,** Sept. 4-11, London, England. For information: Henry J. L. Marriott, M.D., St. Anthony's Hospital, St. Petersburg 33705.

**Laparoscopy Course,** Sept. 24-25, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th St., Jacksonville 32209.

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***For information: Contact Division of Continuing Medical Education, D23-3, University of Miami School of Medicine, P.O. Box 016960, Miami 33101. Tel. (305) 547-6716.**

****For information: Contact Division of Continuing Education, Box J-233, J. Hillis Miller Health Center, Gainesville 32610. Tel. (904) 392-3143, or 392-3183.**

**+For information: Contact Janifer M. Judisch, M.D., CME, University of South Florida, Tampa 33620. Tel. (813) 974-2074.**

### OCTOBER

**19th Workshop in Electrocardiography,** Oct. 4-8, Clearwater Beach. Henry J. L. Marriott, M.D., St. Anthony's Hospital, St. Petersburg 33705.

**Radiology for the Emergency and Primary Care Physicians,** Oct. 10-14, Sahara Hotel, Las Vegas, Nevada. For information: W. T. Haeck, M.D., 3900 N.W. 79th Ave., Suite 469, Miami 33166.

**Fifth Panamerican Seminar,** Oct. 15-19, Wolfson Auditorium, Miami Beach. For information: Federico R. Justiniani, M.D., 4300 Alton Road, Miami Beach 33140.

**Mercy Hospital Cardiovascular Symposium,** Oct. 18-20, OMNI International Hotel, Miami.*

**Laparoscopy Course,** Oct. 29-30, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th Street, Jacksonville 32209.

### NOVEMBER

**Breast Cancer Therapy,** Nov. 6, Holy Cross Hospital, Fort Lauderdale. For information: Jon R. Fichtelman, M.D., P.O. Box 23460, Fort Lauderdale 33307.

**Laparoscopy Course,** Nov. 19-20, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th St., Jacksonville 32209.

**Uveitis Symposium,** Nov. 29-30, Medical Center, University of South Florida, Tampa.+

### DECEMBER

**Pulmonary Function Studies,** Dec. 8, Holy Cross Hospital, Fort Lauderdale. For information: Jon R. Fichtelman, M.D., P.O. Box 23460, Fort Lauderdale 33307.

**Laparoscopy Course,** Dec. 17-18, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th Street, Jacksonville 32209.

### 1980

### JANUARY

**25th Annual Cardiovascular Seminar,** Jan. 11-12, Holiday Inn, Longboat Key. For information: E. Jerry Eatman, P.O. Box 12407, St. Petersburg 33733.

# CLASSIFIED ADS

## Physicians Wanted

### FAMILY PRACTITIONERS

GENERAL PRACTITIONER: For well equipped medical clinic immediately adjacent to 120 bed skilled nursing facility; would also act as medical director for nursing home. Salary 100% of intake. Contact: Administrator, Wakulla Manor Nursing Home, P.O. Box 508, Crawfordville, Florida 32327. Phone: (904) 926-7181.

FAMILY PRACTITIONER. Growing community in northeast Florida offers immediate opportunity to establish private practice. Excellent schools, beautiful beaches, year-round outdoor recreation. Contact: Claude Weeks, Executive Director, Flagler Hospital, P.O. Box 100, St. Augustine, Florida 32084. Phone: (904) 824-8411.

FAMILY PRACTITIONER OR INTERNIST wanted to share facilities with three practitioners in solo practice. Major equipment provided. Rent $250 per month. Competent laboratory and x-ray departments with income based on use. Bookkeeping system and receptionist shared. Contact: T. C. Kenaston Jr., M.D., P.O. Box 550, Cocoa, Florida 32922.

GENERAL PRACTITIONER: Rapidly growing community in central Florida offers immediate practice situation. This physician must have completed three year residency program or have at least two years in practice. Must have Florida license. Excellent opportunity! Contact: Carol Nussbaum, Humana, Inc., P.O. Box 1438, Louisville, Kentucky 40201. Phone: (502) 561-2299.

FAMILY PRACTICE: Opportunity for direct service, medical education and research in the Division of Rural Health, Department of Community Health and Family Medicine. Full-time, salaried practitioner with liberal fringe benefits as director of a family practice in Trenton, Florida, 30 miles from Gainesville. Faculty appointment at assistant professor level. ABFP certified or eligible plus minimum three years of practice experience. Address inquiries with resume to W. J. Coggins, Gainesville, Florida 32610.

LOCUM TENENS: For June, July and August. AAFP. North end Palm Beach County. Florida license necessary. Call 1(305)747-0279 evenings.

### SPECIALISTS

CENTRAL FLORIDA MULTI-SPECIALTY CLINIC HAS OPENING for second general surgeon. Good financial opportunity; new well equipped office near three hospitals. Write C-893, P.O. Box 2411, Jacksonville, Florida 32203.

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INTERNIST — CARDIOLOGIST: Two man practice seeks badly needed associate with immediate availability possible. Excellent opportunity in well established Internal Medicine, noninvasive Cardiology practice. Write C-904, P.O. Box 2411, Jacksonville, Florida 32203.

EXCELLENT OPENING for energetic, Board Certified or Board Eligible Internist, with or without subspecialty in Rheumatology or Neurology for fast growing area in coastal Southwest Florida. Must desire solo practice; ample coverage. Write C-885, P.O. Box 2411, Jacksonville, Florida 32203.

EMERGENCY ROOM PHYSICIAN. Salaried position. 45-hour week (daytime, M-F), overtime optional. Contact Claude Weeks, Executive Director, Flagler Hospital, P.O. Box 100, St. Augustine, Florida 32084. Phone: (904) 824-8411.

MULTISPECIALTY GROUP OF PHYSICIANS located in North Florida seeking to expand in the following specialties: Rheumatology, Gastroenterology, Hematology/Oncology, Endocrinology, and Infectious Diseases. Please send curriculum vitae to: C-928, P.O. Box 2411, Jacksonville, Florida 32203.

EMERGENCY PHYSICIANS for position with young expanding group. Liberal salary package. Send CV to I. Bloomfield, M.D., Medical Director, P.O. Box 160132 Snapper Creek Station, Miami, Florida 33116 or call (305) 596-2896.

INTERNIST WANTED TO SHARE fully furnished office space with other multispecialist group in high income area of Orlando, Florida. Write C-930, P.O. Box 2411, Jacksonville, Florida 32203.

UNIVERSITY PHYSICIAN, UNIVERSITY OF FLORIDA: Must have completed one year of internship as well as two years of residency in a recognized specialty, or four years of general practice. Also must be licensed in the State of Florida, be Board certified or eligible in family practice, internal medicine, or pediatrics. Experience in athletic medicine desired. Salary with excellent fringe benefits. Send complete resumes and salary requirements by August 2, 1979 to Mr. Robert L. Willits, Administrative Employment Manager, 2nd Floor HUB, University of Florida, Gainesville, Florida 32611. Equal Employment Opportunity/Affirmative Action Employer.

PEDIATRIC SURGERY: Board eligible pediatric surgeon sought for appointment as Assistant Professor with experience in academic medicine and laboratory research. Position available July 1, 1979. Equal Employment Opportunity/Affirmative Action Employer. Write C-932, P.O. Box 2411, Jacksonville, Florida 32203.

STAFF PSYCHIATRIST — Community Mental Health Clinic, Key West, Florida. No administrative duties; evaluations, medication and therapy. 30 hour week. Beautiful location. Good

salary and fringe. Write Dr. Nancy Spisso, Executive Director, Community Mental Health Clinic of the Lower Keys, P.O. Box 488, Key West, Florida 33040.

STAFF PSYCHIATRIST: Position, full-time or part-time; outpatient, consultation and training, on-call rotation for crisis stabilization and detox, urban-rural area, based in Tallahassee, two universities, near Gulf beaches. Salary Negotiable. Requires Florida license, board eligible. Contact: John P. Williams, Personnel Administrator, P.O. Box 1782, Tallahassee, Florida 32302.

## MISCELLANEOUS

PHYSICIANS NEEDED FOR NEW multispecialty medical center in Delray Beach, Florida. Primary care and specialty physicians, full or part time. Write P.O. Box 23606, Fort Lauderdale, Florida 33334.

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A BOARD ELIGIBLE INTERNIST looking for a position in Florida. Solo, group or hospital-based practice. Available at any time. Contact (216) 473-0728 or write C-920, P.O. Box 2411, Jacksonville, Florida 32203.

DIAGNOSTIC RADIOLOGIST — 39 years old, just completed residency, former private practitioner of Internal Medicine, seeks position on or near Florida west coast. Reply: Bert L. Booker, M.D., 24—41st Avenue, Isle of Palms, South Carolina 29451.

PHYSICIAN ASSISTANT: Five years experience as house officer for department of surgery with over 3,000 first assists in all types of surgery. Two years experience OB/GYN practice. Seeks group association. Bradford Greene, P.A., 4018 Pine Hill Circle, Orlando, Florida 32808. Phone: (305) 293-7575.

BOARD ELIGIBLE ANESTHESIOLOGIST available from July 1979. Exclusively four solid years of anesthesiology experience. Any situation, full time/part time welcome. Call Desai — home (212) 485-6835/office (212) 240-5356.

INTERNIST-CARDIOLOGIST, 36, FMG, fully US trained. Board eligible. Expertise: ECHO, Stress Testing and all aspects of Clinical Cardiology and Internal Medicine. Knowledge of Spanish. Write C-931, P.O. Box 2411, Jacksonville, Florida 32203 or call (817) 772-9755.

NEUROLOGIST, 35, board- eligible, seeks partnership, group or hospital-based practice in any part of Florida. Experienced in EEG, EMG, and CT. Randolph S. Geslani, M.D., 1300 East & West Road, West Seneca, New York 13224.

INTERNIST-CARDIOLOGIST, certified ABIM and C-V di. board. Florida license. Seeks solo or hospital-based practice. All areas considered. Available July 1979. Write C-933, P.O. Box 2411, Jacksonville, Florida 32203.

GENERAL PRACTITIONER: Age 42, desires office or clinic type practice only, will consider any arrangement/location. Contact: Efren M. Tanjutco, M.D., 5414 Valley Green Drive, D-4, Wilmington, Delaware 19808. Phone: (302) 737-6268.

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FAMILY PRACTICE OR INTERNAL MEDICINE FOR SALE. Central Coral Gables, Florida. 1300 sq. ft. equipped move in go to work. Excellent gross. Owner retiring. Total cost $30.000. Established stable practice. Write C-935, P.O. Box 2411, Jacksonville, Florida 32203.

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OFFICE AND LABORATORY EQUIPMENT FOR SALE: (5 years old), Peter Teodor, M.D., Tampa, Florida. Until June 1st (813) 872-8378. After June 1st (813) 251-5402. From 9 p.m. to 8 a.m. (813) 885-4031.

### Real Estate

OUTSTANDING LOCATION FOR SPECIALIST: St. Nicholas Medical Center. Central location, off street parking and all utilities furnished (including janitor service). Contact W. G. Allen, Jr., Owner-Manager, St. Nicholas Medical Center, 3127 Atlantic Boulevard, Jacksonville 32207. Phone: (904) 398-5500.

LAKELAND, FLORIDA: FOR SALE, 6% down. Air-conditioned office for one to three physicians. Main street, 168 x 140 ft.; double parking lots; extra cottage. Dr. L. Polskin, Box 15966, Honolulu, Hawaii 96815.

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JACKSONVILLE. 1,500 square feet, medically designed office available in newly refurbished Shops of Sherwood (northwest area of Jacksonville). A/C, ample parking. Located in stable, middle income residential community which needs medical doctor. Ideal for growing practice. Some equipment available. Start at $250 per month. Call collect (305) 446-4284.

TOP SOUTH FLORIDA LOCATION FOR SPECIALISTS: Coral Springs, which is one of the fastest growing communities in Florida, needs specialists. Coral Springs Medical Center has office space available in established medical complex. Excellent conditions. Lease or buy in. Contact Bruce McCully, 9441 West Sample Road, Coral Springs, Florida 33065. Phone: (305) 752-1600.

PHYSICIANS OFFICE SUITES, (900 and 1,200 sq. ft.) in fast growing Ocala. Central location, long established physicians complex, with unlimited parking, all utilities and janitor service furnsihed. E. E. Conrad, Owner, P.O. Box 216, Silver Springs, Florida 32688. Phone: (904) 236-2343 or (904) 236-2741.

DOCTOR'S OFFICES AVAILABLE. 1,000 sq. ft. Directly across from Manatee Memorial Hospital. Call Omega Medical Building: (813) 748-7223, Bradenton, Florida 33508.

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MIAMI: 1,200 sq. ft. in beautiful, new medical building adjacent to hospital. Fully equipped. Existing dermatology practice; suitable for other specialties. Contact: Dr. Wayne Porter, 11880 S.W. 40th St., Suite 301, Miami, Florida 33175. Phone: (305) 223-4116.

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The effectiveness of Valium (diazepam) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

**Contraindications:** Tablets in children under 6 months of age; known hypersensitivity; acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy

**Warnings:** As with most CNS-acting drugs, caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Withdrawal symptoms (similar to those with barbiturates, alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal/muscle cramps, vomiting, sweating) Keep addiction-prone individuals (drug addicts or alcoholics) under careful surveillance because of predisposition to habituation/dependence

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations, as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

ORAL Advise patients against simultaneous ingestion of alcohol and other CNS depressants.

Not of value in treatment of psychotic patients, should not be employed in lieu of appropriate treatment. When using oral form adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increase in dosage of standard anticonvulsant medication, abrupt withdrawal in such cases may be associated with temporary increase in frequency and/or severity of seizures.

INJECTABLE *To reduce the possibility of venous thrombosis, phlebitis, local irritation, swelling, and, rarely, vascular impairment when used I.V.: inject slowly, taking at least one minute for each 5 mg (1 ml) given; do not use small veins, i.e., dorsum of hand or wrist, use extreme care to avoid intra-arterial administration or extravasation. Do not mix or dilute Valium with other solutions or drugs in syringe or infusion flask. If it is not feasible to administer Valium directly I.V., it may be injected slowly through the infusion tubing as close as possible to the vein insertion.*

Administer with extreme care to elderly, very ill, those with limited pulmonary reserve because of possibility of apnea and/or cardiac arrest, concomitant use of barbiturates, alcohol or other CNS depressants increases depression with increased risk of apnea, have resuscitative facilities available. When used with narcotic analgesic eliminate or reduce narcotic dosage at least 1/3, administer in small increments. Should not be administered to patients in shock, coma, acute alcoholic intoxication with depression of vital signs.

Has precipitated tonic status epilepticus in patients treated for petit mal status or petit mal variant status.

Withdrawal symptoms (similar to those with barbiturates, alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal/muscle cramps, vomiting, sweating). Keep addiction-prone individuals under careful surveillance because of predisposition to habituation/dependence. Not recommended for OB use

Efficacy/safety not established in neonates (age 30 days or less); prolonged CNS depression observed In children, give slowly (up to 0.25 mg/kg over 3 minutes) to avoid apnea or prolonged somnolence; can be repeated after 15 to 30 minutes If no relief after third administration, appropriate adjunctive therapy is recommended

**Precautions:** If combined with other psychotropics or anticonvulsants, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of Valium (diazepam), *i.e.*, phenothiazines, narcotics, barbiturates, MAO inhibitors and antidepressants. Protective measures indicated in highly anxious patients with accompanying depression who may have suicidal tendencies Observe usual precautions in impaired hepatic function; avoid accumulation in patients with compromised kidney function. Limit oral dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation (initially 2 to 2½ mg once or twice daily, increasing gradually as needed or tolerated).

INJECTABLE Although promptly controlled, seizures may return; readminister if necessary, not recommended for long-term maintenance therapy Laryngospasm/increased cough reflex are possible during peroral endoscopic procedures; use topical anesthetic, have necessary countermeasures available Hypotension or muscular weakness possible, particularly when used with narcotics, barbiturates or alcohol Use lower doses (2 to 5 mg) for elderly/debilitated

**Adverse Reactions:** Side effects most commonly reported were drowsiness, fatigue, ataxia Infrequently encountered were confusion, constipation, depression, diplopia, dysarthria, headache, hypotension, incontinence, jaundice, changes in libido, nausea, changes in salivation, skin rash, slurred speech, tremor, urinary retention, vertigo, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances and stimulation have been reported, should these occur, discontinue drug

Because of isolated reports of neutropenia and jaundice, periodic blood counts, liver function tests advisable during long-term therapy Minor changes in EEG patterns, usually low-voltage fast activity, have been observed in patients during and after Valium (diazepam) therapy and are of no known significance.

INJECTABLE Venous thrombosis/phlebitis at injection site, hypoactivity, syncope, bradycardia, cardiovascular collapse, nystagmus, urticaria, hiccups, neutropenia

In peroral endoscopic procedures, coughing, depressed respiration, dyspnea, hyperventilation, laryngospasm/pain in throat or chest have been reported

**Management of Overdosage:** Manifestations include somnolence, confusion, coma, diminished reflexes. Monitor respiration, pulse, blood pressure; employ general supportive measures, I V fluids, adequate airway Use levarterenol or metaraminol for hypotension, caffeine and sodium benzoate for CNS-depressive effects Dialysis is of limited value

**Supplied:** Tablets, 2 mg, 5 mg and 10 mg, bottles of 100 and 500; Tel-E-Dose® (unit dose) packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10. Ampuls, 2 ml, boxes of 10, Vials, 10 ml, boxes of 1, Tel-E-Ject® (disposable syringes), 2 ml, boxes of 10 Each ml contains 5 mg diazepam, compounded with 40% propylene glycol, 10% ethyl alcohol, 5% sodium benzoate and benzoic acid as buf - ers, and 1.5% benzyl alcohol as preservative

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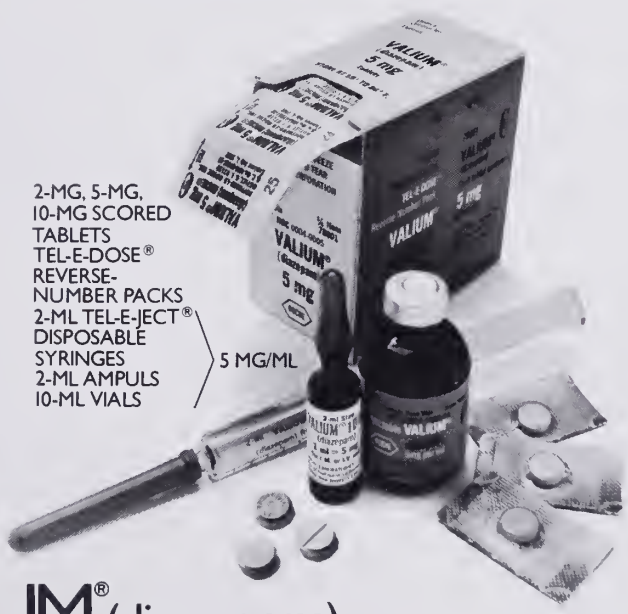


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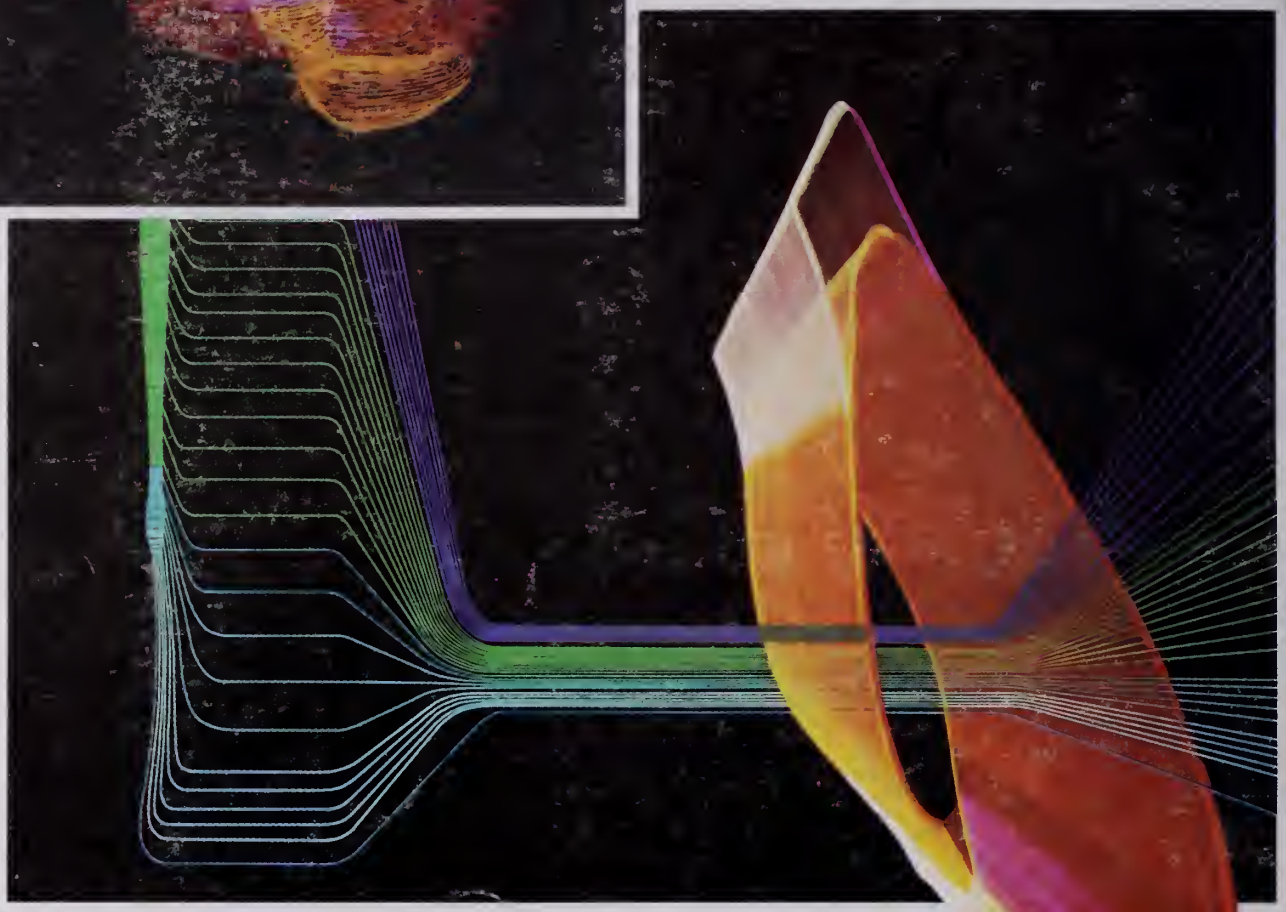

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# PROCEEDINGS ISSUE

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# A character all its own.

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Another important aspect of the clinical character of Valium is safety. Though drowsiness, ataxia and fatigue are possible, these and more serious side effects are rarely a problem. Of course, as with all CNS-acting drugs, patients taking Valium should be cautioned against driving, operating dangerous machinery or the simultaneous ingestion of alcohol.

Unquestionably, many psychotherapeutic agents, including other benzodiazepines, have antianxiety effects. But one fact remains: you get a certain kind of patient response with Valium. It's a response you want. A response you know. A response you trust as part of your overall management of anxiety and psychic tension.

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The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

**Contraindicated:** Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

**Warnings:** Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

**Precautions:** If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

**Side Effects:** Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

**Dosage:** Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

**Supplied:** Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10.

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# President's Page

## Keeping a Free Society Alive

Driving down Interstate 75 from Tallahassee to Tampa after the Legislature adjourned, I was able to reflect on the session, take a deep breath, and rejoice in the fact that we made it through one more time. Each year it is a 4 or 5-month battle to hang on to the principles of private medical practice as we know it.

This was a year of particular vulnerability and exposure. With medical malpractice liability on the back burner as a political issue for the moment, the average M.D. in Florida was not as tuned into Tallahassee as much as in recent years. Health care cost containment and licensure sunset were very much around and threatened the whole fabric of our health care system.

Public concern over the cost of health care has receded in recent months as food and gasoline moved center stage in the inflation drama. Last March, however, a concerted media campaign had made the health system the prime target of political scapegoat seekers. Bills and laws to stamp out the conjured health inflation monster rolled off the presses in state capitals all across the land. Tallahassee was no exception.

Sunset of the Medical Practice Act meant it has to be re-enacted and probably rewritten. This presented an opportunity for every personal and political hang-up about medical doctors to be expressed in amendments to the law that since 1905 has been designed to protect the public from quacks, charlatans and snake oil peddlers. In addition, other practice acts in the various "healing arts" were laid out for amendment with the opportunity for expansion into medical practice for anybody that could make a good case for it.

Meanwhile, a growing army of trial lawyers faced with no fault auto insurance, no fault divorce and medical liability mediation panels chaffed at their perception of the effect of these laws. They consider them a serious invasion of the rights of plaintiffs to seek a redress of grievances before a jury of peers.

In March, the FMA Tallahassee staff found itself with a treacherous path to tread for the ensuing two months. In the meantime, with outstanding exceptions, the FMA membership seemed to feel comfortable that the "malpractice crisis" had been resolved for the moment. There was little that seemed to be very critical.

April and May brought into the political cross currents some of the weirdest alliances we could have imagined. Responding to a collection of horror stories about "bad doctors" and a staff study about licensing board disciplinary whitewashes in other fields, the Committee on Regulatory Reform in the House began to all but abolish the power of licensing boards. Aided heavily by the accountants and real estate brokers the FMA staff worked with committee staff, committee members and chairmen in both houses to bring out a modified reorganization of the state regulatory department that preserves the integrity of the boards with moderate dilution of their power. The Dental Association and part-time FMA Counsel John French did a masterful job of amendment drafting and wording revision at key moments. Scotty Fraser, Phil Gilbert and George Palmer Jr. must have worn out the new Capitol corridor terrazzo running after legislators and keeping House-Senate communications open on the issues. FMA bill analyst Nancy Moreau picked up the flaws and zingers in perhaps a hundred bills that could have threatened Florida's health system.

The Medical Practice Act remained intact. Most of the issues were resolved because all professions were jeopardized by many committee proposals. Other issues affected medical doctors only. It took long hours of convincing legislators by Scotty and his team to keep Florida medical licensure afloat.

The Health Cost commission concept was essentially a hospital problem but hospital staffs were well enmeshed in the issue. Escape clauses for private doctors were inserted and the commission itself wound up with about the same power as a chained watchdog. It does have an effective weapon in its power to publicize unwarranted hospital overcharges.

Medical education received its biggest financial boost in many years. We can be proud of the Legislature for that.

As downtown Tampa's First Financial Tower hove into view, I could not help but think about that bastion of private enterprise and the FMA role in this highly politicized society as not only a professional group but as a key factor in trying to keep alive a free society in our state and nation.

Richard Hodes

---

**More than 200 physicians and others attended the Sarasota Medical Awards Conference in April. Four scientists who have made outstanding contributions to medical service and health care gave papers and were presented awards of $10,000 each. They are: Rosalyn S. Yalow, Ph.D., Senior Medical Investigator, VA Hospital, Bronx, N.Y.; Robert A. Good, Ph.D., President and Director, Sloan-Kettering Institute for Cancer Research, New York; Paul Berg, Ph.D., Professor of Bio-Chemistry, Stanford University Medical Center, Stanford, Calif.; and Eugene Braunwald, M.D., Professor and Head of the Department of Medicine, Harvard Medical School, Boston. Pictured left to right are: Dr. Good; FMA Secretary Robert E. Windom, M.D., Sarasota; Dr. Yalow; S. Philip Bralow, M.D., Sarasota; Dr. Braunwald; George Bishopric, M.D., Sarasota; Dr. Berg; and Thomas A. O'Malley, M.D., Sarasota.**

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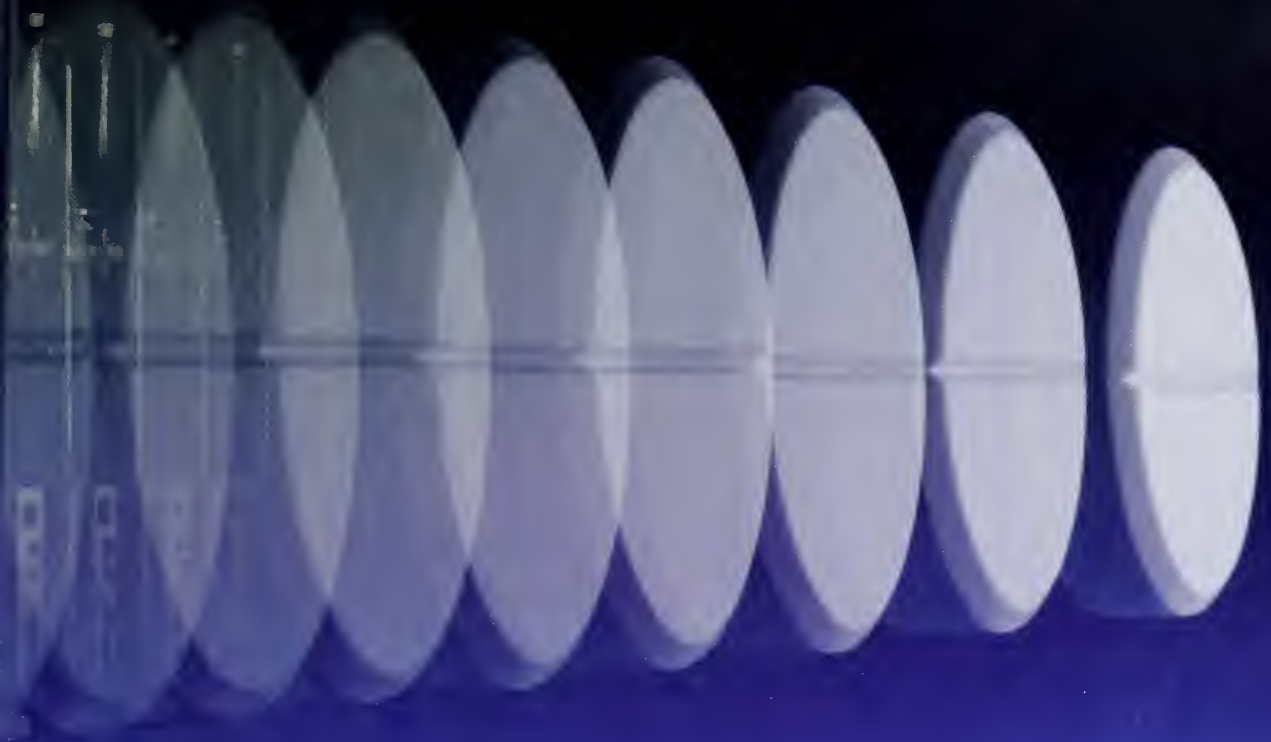

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*See following page for a brief summary of prescribing information.*

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## Zero-Order Anhydrous Theophylline

### Sustained Action Tablets

**Description:** THEO-DUR Sustained Action Tablets contain anhydrous theophylline, with no color additives.

**Actions:** The pharmacologic actions of theophylline are as a bronchodilator, pulmonary vasodilator and smooth muscle relaxant since the drug directly relaxes the smooth muscle of the bronchial airways and pulmonary blood vessels. Theophylline also possesses other actions typical of the xanthine derivatives: coronary vasodilator, diuretic, cardiac stimulant, cerebral stimulant and skeletal muscle stimulant. The actions of theophylline may be mediated through inhibition of phosphodiesterase and a resultant increase in intracellular cyclic AMP which could mediate smooth muscle relaxation.

**Indications:** Symptomatic relief and/or prevention of asthma and reversible bronchospasm associated with chronic bronchitis and emphysema.

**Contraindications:** THEO-DUR is contraindicated in individuals who have shown hypersensitivity to any of its components or xanthine derivatives.

**Warnings:** Excessive theophylline doses may be associated with toxicity; serum theophylline levels should be monitored to assure maximum benefit with minimum risk. Incidence of toxicity increases at serum levels greater than 20 mcg/ml. High blood levels of theophylline resulting from conventional doses are correlated with clinical manifestations of toxicity in: patients with lowered body plasma clearances, patients with liver dysfunction or chronic obstructive lung disease, and patients who are older than 55 years of age, particularly males. There are often no early signs of less serious theophylline toxicity such as nausea and restlessness, which may appear in up to 50% of patients prior to onset of convulsions. Ventricular arrhythmias or seizures may be the first signs of toxicity. Many patients who have higher theophylline serum levels exhibit a tachycardia. Theophylline products may worsen pre-existing arrhythmias.

**Usage in Pregnancy:** Safe use in pregnancy has not been established relative to possible adverse effects on fetal development, but neither have adverse effects on fetal development been established. This is, unfortunately, true for most anti-asthmatic medications. Therefore, use of theophylline in pregnant women should be balanced against the risk of uncontrolled asthma.

**Precautions:** THEO-DUR TABLETS SHOULD NOT BE CHEWED OR CRUSHED. Theophyllines should not be administered concurrently with other xanthine medications. It should be used with caution in patients with severe cardiac disease, severe hypoxemia, hypertension, hyperthyroidism, acute myocardial injury, cor pulmonale, congestive heart failure, liver disease and in the elderly, particularly males, and in neonates. Great caution should be used in giving theophylline to patients in congestive heart failure since these patients show markedly prolonged theophylline blood level curves. Use theophylline cautiously in patients with history of peptic ulcer. Theophylline may occasionally act as a local irritant to GI tract although gastrointestinal symptoms are more commonly central and associated with high serum concentrations above 20 mcg/ml.

**Adverse Reactions:** The most consistent adverse reactions are usually due to overdose and are:
Gastrointestinal: Nausea, vomiting, epigastric pain, hematemesis, diarrhea.
Central Nervous System: Headaches, irritability, restlessness, insomnia, reflex hyperexcitability, muscle twitching, clonic and tonic generalized convulsions.
Cardiovascular: Palpitation, tachycardia, extrasystoles, flushing, hypotension, circulatory failure, life threatening ventricular arrhythmias.
Respiratory: Tachypnea.
Renal: Albuminuria, increased excretion of renal tubular cells and red blood cells; potentiation of diuresis.
Others: Hyperglycemia and inappropriate ADH syndrome.

**How Supplied:** THEO-DUR 100 mg, 200 mg and 300 mg sustained action scored tablets are available in bottles of 100 and 1000; and in unit dose packages of 100.

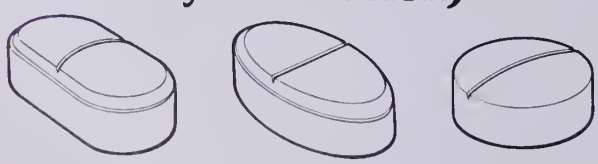
**Caution:** FEDERAL LAW PROHIBITS DISPENSING WITHOUT A PRESCRIPTION.

*For full prescribing information, see package insert.*

# ZERO-ORDER

## dc/dt=K™

## (Constant rate absorption by GI infusion)



300 mg 200 mg 100 mg

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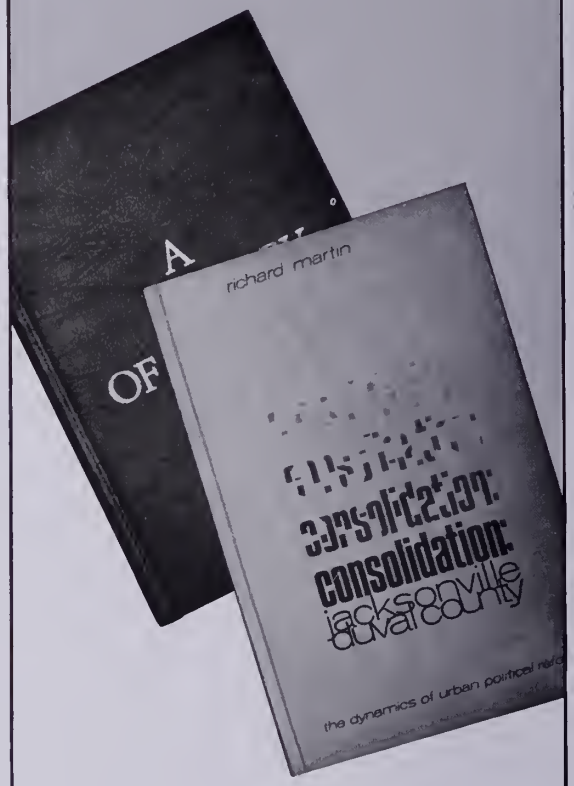


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**Adverse Reactions:** Serious side effects have not been found. Some sublingual irritation, transient nausea, and gastric disturbances have been reported. Hydergine tablets and sublingual tablets do not possess the vasoconstrictor properties of natural ergot alkaloids.
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**Hydergine sublingual tablets 1 mg,** containing dihydroergocornine mesylate 0.333 mg, dihydroergocristine mesylate 0.333 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.333 mg, representing a total of 1 mg; packages of 100, 500, and 1000. **Hydergine sublingual tablets 0.5 mg,** containing dihydroergocornine mesylate 0.167 mg, dihydroergocristine mesylate 0.167 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.167 mg, representing a total of 0.5 mg; packages of 100 and 1000.
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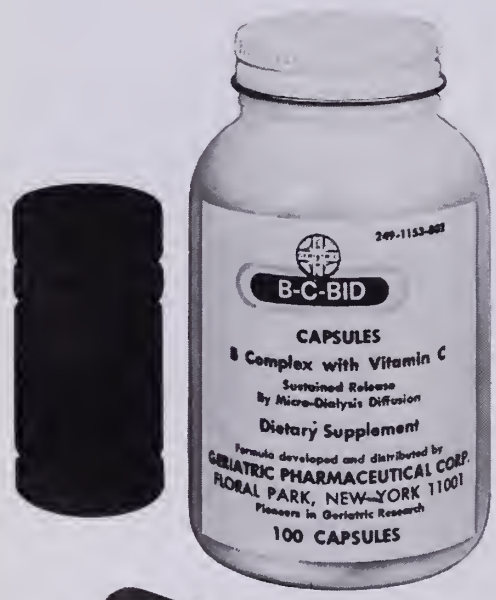


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# Dean's Page

## BACK TO THE GRAVEYARD

Hollis G. Boren, M.D.

There is a repository for medical school curricula since only a small fraction of those curricula used in the past are in actual use at any given time. Indeed there seems to be a never ending search for new and presumably better means of teaching medicine. Some of this activity stems from technological advances such as self-teaching techniques and computer assisted instruction. More effort is spent in an honest attempt to provide a better environment and greater substance for the medical education process. These efforts continue at all medical schools despite documentation to the effect that there is no one ideal medical curriculum and that the greatest profit from what might be called minor changes in the curriculum is the self-evaluation which the faculty undergoes during their deliberations which precede curricular change.

One of the most drastic changes in the medical school curriculum is that from a four-year to a three-year curriculum. When there is sufficient national pressure to produce physicians more rapidly, as in time of war or a severe doctor shortage, many of our medical schools switched to a three-year curriculum. Such was the case with the University of South Florida College of Medicine in 1972. Nationally 25 of 210 medical schools changed to a three-year curriculum; yet in 1979, only two schools, including ours, remain with the three-year curriculum.

Beginning in early 1978 the faculty of the University of South Florida College of Medicine gave serious consideration to changing back to a four-year curriculum. A group of committees reviewed and evaluated what was being taught by each of our 15 departments. Special attention was given to areas which might be overlooked to the extent of overlap of instruction by different departments and to the methods of enhancing the degree of correlation between disciplines. Following this the Curriculum Committee identified and studied the impact of critical shortcomings of the three-year curriculum on our students. Our medical students were surveyed and a majority favored a four-year curriculum. Next a truly unique event happened: The general faculty unanimously approved a change to a four-year curriculum. The Board of Regents has now authorized the University of South Florida College of Medicine change to a four-year curriculum with the entering class of 1980 and the Liaison Committee for Medical Education has been so informed.

It is informative to examine the principal weaknesses of the three-year curriculum. Or conversely, we may wish to consider these factors as advantages of the four-year curriculum. The four-year curriculum will allow the following:

- Completion of all clinical clerkships prior to selecting a postgraduate training program. Selected courses may be taken before making career decisions.
- Our students will be more competitive by not bearing the stigma of being a product of a "three-year program".
- Adequate time for our students to review or remedy difficulties they may have had.
- Time to enrich our students' experience in many areas, including medical research.
- Additional material to be added to the curriculum when necessary.

Dr. Boren is Director of the University of South Florida Medical Center and Dean of the College of Medicine, Tampa.



The opinions stated on this page are those of the individual Deans and do not necessarily represent the policy of the FMA.

- The opportunity for greater interaction among students and faculty.

In general our faculty has characterized our three year curriculum as being "inflexible" or "unforgiving." This is not to say that it has not allowed us to produce a superb product. I believe the members of the FMA who have contacted our graduates can attest to the fact that we have indeed produced physicians of superb quality. To continue to do so as our class size has increased to the maximum of 96 students per class has become progressively more difficult. There is also an excellent chance that we may provide an even better educational experience using the four-year curriculum as a vehicle.

So now our three-year curriculum goes back to that graveyard which is reserved for old curricula. But this graveyard has a special breed of inhabitants, for old curricula like old soldiers never die.

• Dr. Boren, University of South Florida, Tampa 33612.

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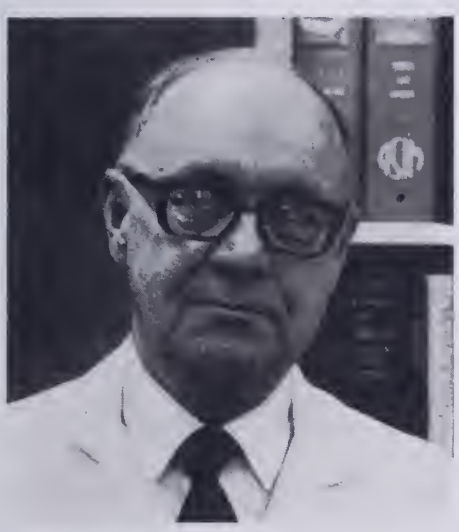
*—Dr. William Felts, Past President, American Society of Internal Medicine*



More and more physicians today are beginning to realize the extent of the economic influence they have, and are finding ways of holding costs down.

A number of studies show that the more physicians *know* about costs, the more they try to *reduce* them.* And this reduction can be done without reducing the quality of care to the patient.

How are they doing this? As a start they have become thoroughly familiar with the costs they incur on behalf of their patients. They know how much an X-ray costs, how much their hospital charges for routine lab tests. They're requesting copies of patients' hospital bills. And asking their hospitals to print the charges for diagnostic tests right on the order sheet.

What else are physicians doing? Minimizing their patients' hospital stays, whenever possible. Reevaluating routine admissions procedures. Questioning the real need of the diagnostic tests they order for their patients. Avoiding duplicate testing. Trying to discourage their patients' demands for unnecessary medication, treatment or hospitalization. Compiling daily logs of their medical decisions and what they cost. And more.

More physicians today realize what a tough problem we're all faced with. They know this is a challenge for medicine. And that physicians are in the best position to deal with and solve the problem.

**PATIENT CARE Magazine—Outlook 1977, "Face-Off: Cost Containment vs. Chaos," January 1, 1977.*

*Lyle CB, et al. "Practice habits in a group of eight internists," ANNALS OF INTERNAL MEDICINE 84 (May 1976), 594-601.*

*Schroeder SA, et al. "Use of laboratory tests and pharmaceuticals: variation among physicians and effect of cost audit on subsequent use," JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION 225 (Aug. 20, 1973), 969-73.*

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# Professional Liability Legal Update

## Confidentiality of Committee Records Upheld

The Third District Court of Appeal recently rendered a decision upholding the confidentiality of the records of a medical review committee. The committee involved was the Ethics Committee of the Dade County Medical Association. The issue concerning the confidentiality of the Ethics Committee's records arose out of an action between parties involved in an auto accident. During the course of this litigation, the defendants served a subpoena on the DCMA asking for "any and all records" concerning the plaintiff's two treating physicians. The DCMA moved for an order prohibiting discovery of these records as privileged under Section 768.40, Florida Statutes or as a matter of public policy. The trial court denied the motion and ordered production of the records. The DCMA petitioned the Third District Court of Appeal for certiorari and for a stay of the order of production.

At the outset, it was recognized by the appellate court that the function of the Ethics Committee, i.e., investigating and considering issues which involve the professional conduct of its member physicians, was a salutary one which should be encouraged. The Court felt that both complaints and free discussion about the activities of physicians would be markedly discouraged if their contents were to be held open to public perusal, and that these considerations were largely responsible for the enactment of Section 768.40.

Although the court held that the Ethics Committee of the DCMA undoubtedly qualified as a "medical review committee" under Section 768.40 (1), it refused to hold that the records were privileged from discovery under Section 768.40 because that Section provides that the privilege exists only "in a civil action against a provider of professional health services" and the action in question was simply one for damages against those who negligently caused a auto accident. In spite of the inapplicability of the statutory privilege of Section 768.40, the court did not feel that "we may or should ignore the considerations of public policy which informed the enactment of the statute." The court noted that even without a pertinent statute, cases from other states have held that records of bodies similar to the Ethics Committee are not subject to discovery. On that basis, the Court denied discovery holding that: "in view of what has been called 'the overwhelming public interest in maintaining the confidentiality' of such records . . . the defendants have not made the 'showing of exceptional necessity' or of 'extraordinary circumstances' which is required to justify their production." *Dade County Medical Association v. Tardiff*, (Fla. 3rd DCA, Case No. 79-265, May 22, 1979).

Prepared and submitted by John E. Thrasher, J.D., Vice President and Legal Counsel and Anthony J. McNicholas, III, J.D., Associate Legal Counsel, Professional Insurance Management Co. (PIMCO), Jacksonville, Florida.

## Absence of Surgical Consent

Patient sued her surgeon alleging that during the course of an operation to remove a protrusion from the bridge of her nose, the surgeon also operated on the tip of her nose without consent. The trial judge directed a verdict for the surgeon on the grounds that the patient did not present evidence that the surgeon's action was contrary to medical practice. The appellate court reversed holding that the requirement for such expert medical testimony in cases based upon the lack of informed consent does not apply in cases involving the total absence of consent. Although the patient signed a general consent to a rhinoplasty this did not constitute permission to operate on the tip of her nose in view of express instructions to the contrary. F.S. 768.46 (4) (a) regarding informed consent was inapplicable. *Meretsky v. Ellenby*, (Fla. 3rd DCA, Case No. 78-1613, May 15, 1979).

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See following page for brief summary

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**DESCRIPTION:** Pronestyl (Procainamide Hydrochloride) is the amide analogue of procaine hydrochloride and is available for oral administration as veneer-coated tablets providing 250 mg, 375 mg, and 500 mg procainamide hydrochloride.

**CONTRAINDICATIONS:** In patients with myasthenia gravis and where a hypersensitivity to procainamide exists; bear in mind cross sensitivity to procaine and related drugs. Should not be given to patients with complete atrioventricular heart block. Contraindicated in cases of second degree and third degree A-V block unless an electrical pacemaker is operative.

**PRECAUTIONS:** Evidence of untoward myocardial responses should be carefully watched for in all patients. In the presence of myocardial damage with atrial fibrillation or flutter, the ventricular rate may increase suddenly as the atrial rate is slowed; adequate digitalization reduces but does not abolish this danger. Ventricular tachysystole is particularly hazardous if myocardial damage exists.

The dislodgment of mural thrombi producing an embolic episode may occur in correcting atrial fibrillation due to the forceful contractions of the atrium.

Extreme caution is required in attempting to adjust the heart rate when ventricular tachycardia has occurred during an occlusive coronary episode or where the use of procainamide may result in additional depression of conduction and ventricular asystole or fibrillation as in second degree and third degree A-V block, bundle branch block, or severe digitalis intoxication.

Bear in mind when treating ventricular arrhythmias in patients with severe organic heart disease and ventricular tachycardia that complete heart block, which may be difficult to diagnose, may be present. Since asystole may result if the ventricular rate is significantly slowed without attainment of regular atrioventricular conduction, procainamide should be stopped and the patient re-evaluated.

In the presence of both liver and kidney damage, normal dosage may produce symptoms of overdosage—principally ventricular tachycardia and severe hypotension.

A syndrome resembling lupus erythematosus has been reported with oral maintenance procainamide therapy. Common symptoms are polyarthralgia, arthritis and pleuritic pain. Fever, myalgia, skin lesions, pleural effusion and pericarditis may also occur. Rare cases of thrombocytopenia or Coombs-positive hemolytic anemia, possibly related to this syndrome, have been reported. Measure anti-nuclear antibody titers at regular intervals in patients on procainamide for extended periods of time or in whom symptoms suggestive of lupus-like reaction appear; in event of rising titer (anti-nuclear antibody) or clinical symptoms of LE, assess the benefit/risk ratio related to continued procainamide therapy (see boxed Warning). Steroid therapy may be effective if discontinuation of procainamide does not cause remission of symptoms. If the syndrome develops in a patient with recurrent life-threatening arrhythmias not otherwise controllable, steroid-suppressive therapy may be used concomitantly with procainamide.

**ADVERSE REACTIONS:** Hypotension is rare with oral administration. Serious disturbances of cardiac rhythm such as ventricular asystole or fibrillation are more common with I.V. administration.

Large oral doses may sometimes produce anorexia, nausea, urticaria, and/or pruritus.

A syndrome resembling lupus erythematosus has been reported in patients on oral maintenance therapy (see Precautions). Reactions consisting of fever and chills have been reported, including a case with nausea, vomiting, abdominal pain, acute hepatomegaly, and a rise in serum glutamic oxaloacetic transaminase following single doses of the drug. Agranulocytosis has been occasionally reported following repeated use of the drug, and deaths have occurred. Therefore, routine blood counts are advisable during maintenance procainamide therapy; and the patient should be instructed to report any soreness of the mouth, throat or gums, unexplained fever or any symptoms of upper respiratory tract infection. If any of these symptoms should occur and leukocyte counts indicate cellular depression, procainamide therapy should be discontinued and appropriate treatment should be instituted immediately. Bitter taste, diarrhea, weakness, mental depression, giddiness, psychosis with hallucinations, and hypersensitivity reactions such as angioneurotic edema and maculopapular rash have been reported.

For full prescribing information, consult package insert.

**HOW SUPPLIED:** Pronestyl Tablets (Procainamide Hydrochloride Tablets) providing 250 mg, 375 mg, and 500 mg procainamide hydrochloride are available in bottles of 100 and Unimatic® single-dose packaging in cartons of 100. The 250 mg and 500 mg tablets are also available in bottles of 1000.

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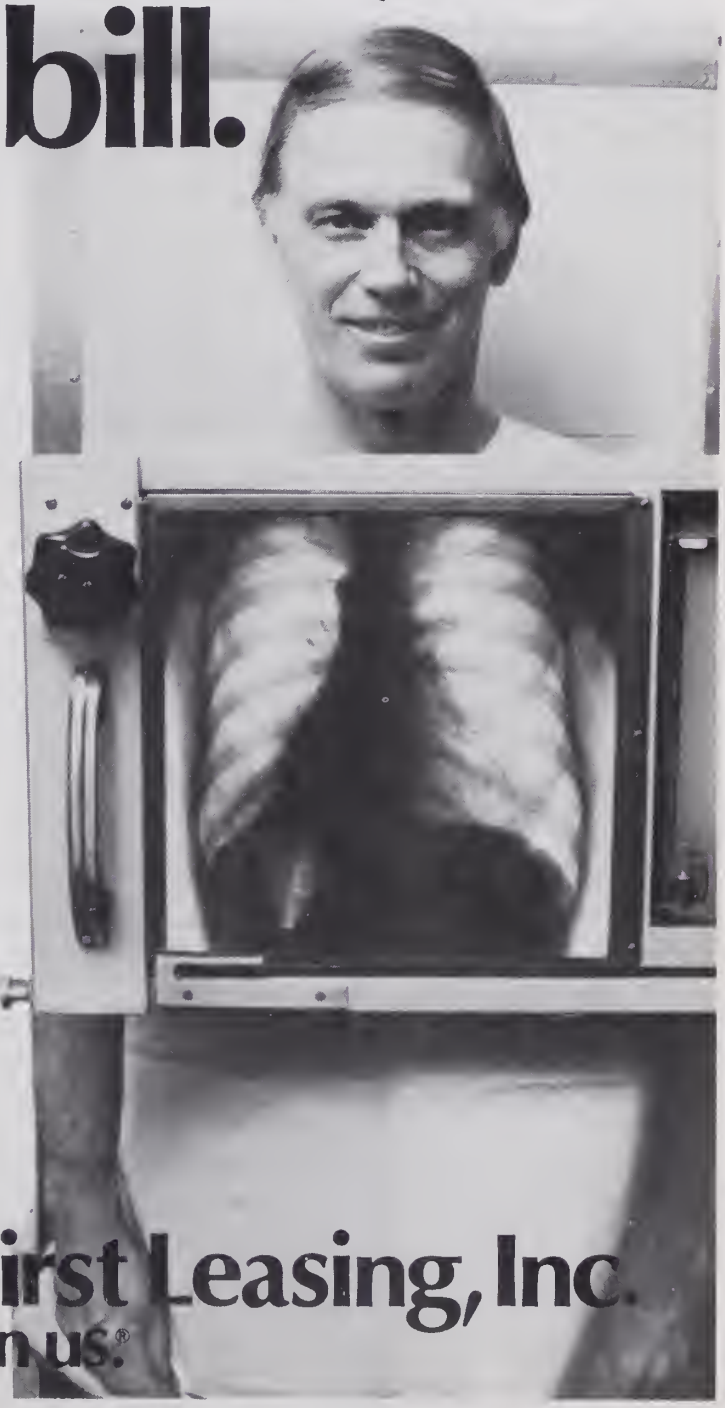

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# FROM THE EDITOR'S DESK

## CARTER NHI PLAN

The Carter Administration has made public details of its version of National Health Insurance. It's called Health Care and the Administration places on it a price tag of about $25 billion for the first year, 1983. The Carter plan would limit each family's out-of-pocket health care costs to $2,500 per year; combine Medicare and Medicaid into one program; double the number of poor people eligible for aid; and require employers to pay at least 75% of employee health insurance premiums. Senator Edward Kennedy, who previously announced his "Health Care for All Americans Act," denounced the Administration program as "too inflationary and too inequitable."

## JUDICIAL SHORT CIRCUIT

The Department of Health Education and Welfare has asked Congress for authority to levy civil penalties of up to $2,000 against health care providers who submit fraudulent Medicare or Medicaid claims. The penalty could be appealed in the courts, but HEW could assess the fine without Justice Department prosecution. Said HEW Secretary Joseph Califano: "The civil penalty would help us move quickly against the defrauders when criminal prosecution may not be warranted or practical.

## COST CONTAINMENT

Less than half of the nation's hospitals would be affected by the Administratio hospital cost containment bill as it now stands in the Senate. As approved by a subcommittee of the Senate Human Resources Committee, hospital revenue increases wou be limited to 10.9% per year, instead of the 9.7% proposed by the Administration. T measure was to be taken up by the Senate Finance Committee last month.

## HOSPITAL ADMISSION X-RAYS

The Joint Commission on Accreditation of Hospitals says it is opposed to routin clinical lab tests or x-rays as part of normal hospital admissions requirements. JCAH standards, it was pointed out, do not mandate routine examinations. In recent months, the Blue Cross and Shield Associations have recommended to member plans that they pay for routine admission tests only when specifically ordered by a physician.

## HOSPITAL CORPORATION OF AMERICA

Officials of Hospital Corporation of America are initiating a cost awareness program for 9,000 physicians working in HCA's 125 hospitals. The program is called "Working Together." It will emphasize ambulatory care, cost-awareness education for doctors and consumers, material management, improved scheduling practices and utilization review.

## HEALTH PLANNING AMENDMENTS

The Health Planning Amendments passed by the Senate in May would authorize $256 million for health planning activities over the next three years. The amendments had not cleared the House by early June. A major change in this year's Senate bill is the exemption of major medical equipment from certificate of need requirements if the equipment is not owned by or located in a health care facility.

## CONTROLLING THE VIEWS

The Federal Trade Commission staff has concluded a three-year study with a recommendation that physician groups be prohibited from controlling Blue Shield plans. "Medical control of a plan means that physicians' organizations set or strongly influence the prices that members will be paid by the plan," the report contended. Blue Cross-Blue Shield Associations President Walter J. McNerney replied that such regulation would be "unnecessarily costly to America's taxpayers, potentially harmful to Blue Shield subscribers, and factually unsupportable."

## HOUSESTAFF BARGAINING

The National Labor Relations Board has appealed a court ruling that allows housestaffs to organize and engage in collective bargaining. In 1976, the NLRB held that interns and residents are students and not covered by the National Labor Relations Act. The U. S. Court of Appeals for the District of Columbia reversed that ruling. Now, the NLRB contends that the courts have no jurisdiction in the matter.

## VIDEO VIOLENCE

An updated study indicates that violence on the television tube has reached a record level in programs aimed at children. The update, provided by the University of Pennsylvania Annenberg School of Communications, focused on the fall of 1978. The survey uncovered 25 incidents of violence for each hour of weekend-daytime programming, compared with 15.6 per hour the previous fall. Violence is defined as threatened or actual harm or murder. The Annenberg study is funded by the AMA and the National Institute of Mental Health.

## OCCUPATIONAL HEALTH

The 29th Annual AMA Congress on Occupational Health will be held at Chapel Hill, N. C., October 24-26. The Conference carries up to 12 hours of AMA Category I CME Credit. Registration fee is $60 for physicians and $40 for allied health professionals. Additional information is available from the AMA Department of Environmental, Public and Occupational Health in Chicago.

**The Editor**

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**Abstract: Modern forms of electroconvulsive therapy bear little resemblance to its prototypes. Discomfort, risks, and complications have been sharply reduced by the routine use of anesthesia and muscle relaxation. Sequelae and side effects have been diminished by modification in the electrical current utilized, alternative placement of electrodes, and oxygenation. The indications for ECT are limited primarily to the treatment of severe psychotic depression in the presence of significant fatality risk or when other treatments have failed. When ECT is indicated, the therapeutic benefits of the treatment may outweigh the side effects, and alternative treatments are not always available. To abolish or severely restrict the use of ECT by legislative mandate will be harmful to those patients for whom it is indicated. In the final analysis, even the present forms of ECT are likely to be improved or replaced by newer treatments as they become available.**

# Electroconvulsive Therapy (ECT) A Moderate View

**Medhat G. Ashamalla, M.D.**

Electroconvulsive therapy (ECT) is one of the most controversial treatments in current psychiatric practice, with opinions on its appropriate use continuing to be highly polarized. Some critics attack any use of this treatment with a harshness usually reserved for mediveal forms of torture, while some adherents back it as if it were a paragon of endless virtues. In the heat of debate its opponents usually minimize its therapeutic value while maximizing its ill effects. Both sides tend to ignore those few who approach ECT with the calm objectivity which befits a treatment that has appropriate therapeutic benefits and limitations.

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Those who oppose the use of ECT often ignore certain fundamental issues. First, in its present form, ECT is different from its obsolete prototypes. Second, while demands are made to abolish the use of ECT even in the treatment of those disorders for which it is indicated and is effective, no viable alternatives are presented. Third, these disorders are serious in that they can lead to fatality, morbidity, invalidism, suffering, anguish, work disability, and financial loss.

Proponents of ECT, on the other hand, must be reminded that indiscriminate utilization of this treatment subjects the patient needlessly to a major form of treatment whose risks, sequelae, and complications may exceed those of the disorder for which treatment is intended. Contrary to what is occasionally indicated, ECT is not a trivial procedure. A treatment which involves a general anesthetic, muscle relaxant and

passage through brain tissue of an electric current of sufficient strength to induce a seizure is significant.

The present review attempts to discuss pertinent issues related to the development of ECT and to dispel some of the mythology that has often been associated with it since its inception.

## Early History

The therapeutic benefits derived from induced convulsions in certain severe mental disorders have been known since 1785 when Oliver reported his results using camphor to induce convulsions in the treatement of a melancholic patient.[1] While camphor did not induce seizures reliably, and its oral use was attended by great discomfort such as vomiting and dizziness, it was utilized intermittently into the present century and only disappeared when intravenous metrazol was introduced during the early 1930's. The use of metrazol represented an improvement over the crudeness of camphor but it too had serious drawbacks in that certain patients experienced severe panic both prior to and following the convulsions.

In 1938 two Italian research psychiatrists, U. Cerletti and L. Bini, ushered in the modern use of electricity to induce convulsions. They had previously perfected a machine and a technique whereby they were able to administer alternating current to experimental animals without demonstrable brain damage. This encouraged them to use this method in treating a patient with catatonic schizophrenia. Again, the introduction of electricity was an improvement over metrazol since it was less dangerous, less expensive, easier to quantify, and produced milder convulsions.

The techniques for ECT were so extensively developed during the next decades that present forms of administration bear little resemblance to those used earlier. These developments focused on procedure, indications, and safety.

## Current Techniques of Administration (Modified ECT)

A summary of the technique of ECT will be presented here as a basis for further discussion. ECT is administered under narcosis, muscle relaxation and oxygenation. Intravenous barbiturate anesthesia is most often used to induce narcosis. If this is contraindicated, a subconvulsive electrical stimulus may be used instead. Thus, the patient has no awareness of the convulsions nor is any pain experienced. Succinylcholine is most often used to induce muscle relaxation. It "modifies" the peripheral manifestations of the seizure and hence obviates severe muscular contractions which may result in fractures, dislocations, and cardiovascular strain. Oxygenation can prevent cerebral hypoxia and consequently reduces confusion and memory defects. Vital signs are monitored during treatment and recovery.

ECT may be given bilaterally or unilaterally. In bilateral ECT, the electrodes are most often applied bitemporally. In unilateral ECT, the electrodes are applied to the same hemisphere, most often to the nondominant one. An electric current which varies in form, voltage, and duration with the particular apparatus being used is applied to induce a cerebral seizure. Since the neuromuscular junctions are blocked by succinylcholine, the seizure is evidenced by brief and very mild tonic-clonic contractions in the facial muscles and the small muscles of the hands and feet. Bodies do not writhe and limbs do not thrash uncontrollably. If the clonic contractions do not occur, it is likely that the patient has received a subseizure stimulus. Since this has little therapeutic effect and can cause discomfort, the treatment should be promptly readministered. It is possible that EEG monitoring during treatment in the future will permit the use of less voltage over shorter duration since cerebral seizures will be detected even when no peripheral manifestations are apparent. Within 5-10 minutes, the patient returns to consciousness but there is a period of postictal confusion that lasts for approximately 15 mintues.

The usual course of treatment varies with the needs of each patient, but most often consists of a total of up to 16 treatments on a thrice weekly schedule. Use of multiple ECT (more than one treatment during one period of anesthesia) has been attempted but the results have not proved its therapeutic superiority over conventional ECT, and significantly more undesirable side effects have been observed.[2]

## Therapeutic Effectiveness of ECT

Reports of controlled clinical studies[3-5] support the effectiveness of ECT in the treatment of severely psychotically depressed patients. While tricyclic antidepressant drugs have also been demonstrated to be effective, there is evidence that ECT brings about a more prompt response. Promptness is crucial during emergencies such as when the patient is determinedly suicidal or the illness is fulminating. Moreover, modified ECT may occasionally be safer than antidepressant drugs in depressed patients who are susceptible to anticholinergic crisis, concomitantly suffer from myocardial disease or arrhythmias, or are in the first trimester of pregnancy when the teratogenic effect of drugs is a possibility. Currently, ECT is appropriately used when a severe depression has not responded to an adequate therapeutic trial of antidepressant drugs.

The proportion of severely depressed patients showing a good response to ECT ranges between 70-

80%. Certain symptoms have been found to predict a good response to ECT. These include early morning awakening, moderate to severe psychomotor retardation, profound depression of mood, duration of illness less than one year, a history of prior improvement on ECT, nihilistic delusions, and a family history of depressive illness. Neurotic traits in child or adult life, inadequate or hysterical personality, emotional lability and anxiety are negatively correlated with good response. Kantor and Glassman[6] have also reported that ECT is the preferred treatment for severe depression with a major delusional component.

Although patients who respond to ECT usually suffer from late onset unipolar illness (involutional melancholia) or bipolar affective disorder, depressed type, the diagnosis is less predictive of response than the clinical manifestations. These depressions are most often endogenous. However, if there is a precipitating cause, the clinical picture is disproportionate to the severity of the stress. There is no evidence that ECT will benefit reactive depressions, characterological depressions, or depressions associated with neurotic disorders. The value of ECT is limited to a current depressive episode. Depending on the nature and course of the illness, future episodes may occur and these may or may not require the same treatment.

ECT in the treatment of acute schizophrenia and acute mania has largely been supplanted by the use of appropriate drugs. The appropriate use of ECT in these conditions is limited to drug nonresponders, except in cases where the patient's life may be threatened by cardiovascular collapse, starvation, electrolyte imbalance, or imminent suicide or homicide. ECT is ineffective in the treatment of chronic schizophrenia.

## Side Effects, Risks, and Complications

Any significant medical treatment has side effects and risks, and ECT is no exception. Most medical treatments that are perfectly safe are, unfortunately, perfectly useless as well.

Since ECT transiently elevates intracranial pressure (ICP), any space occupying lesion or other preexisting condition causing increased ICP is an absolute contraindication of ECT due to the risk of tentorial herniation. Recent myocardial infarction will also preclude its use since arrhythmias may occur and precipitate reinfarction. When the EKG and cardiac enzymes stabilize, ECT may be administered with caution after consultation with a cardiologist. In these instances, the risks resulting from the depressive illness must be weighed against those incurred by the treatment.

With vertebral osteoporosis, healed vertebral fractures, and thoracic aneurysms, care must be taken to insure adequate muscle relaxation, ECT has been safely given to expectant mothers as late as one month before delivery. General anesthetic and muscle relaxant risks must be considered in patients treated with ECT.

When death occurs with ECT, it is primarily due to complications, particularly preexisting diseases of the cardiovascular system. In 1942 Kolb and Vogel[7] found a fatality rate of 0.06%, while in 1975 Kalinowsky[8] reported it to be only 0.002 to 0.003%. In addition, Clare[1] points out a decrease in the absolute number of deaths associated with ECT during the last 20 years in the absence of a corresponding decrease in the use of ECT. This decline in fatality may have been due in part to the exclusion from treatment of patients who are too physically ill to tolerate it.

## ECT and Brain Damage

Much investigative work has been directed at the question as to whether uncomplicated electroconvulsive therapy causes brain damage. Data have been derived from neuropathologic studies of patients who died after electroconvulsive therapy and experimental work on animals.

Postmortem examination in such patients reveals marginal gliosis and astrocytic proliferation within the white matter. Alpers[9] and Larsen[10] describe perivascular hemorrhages, edema and localized subarachnoid hemorrhage at the electrode site. These changes are considered to be reversible. Furthermore, lasting neuropathological changes with significant clinical impact such as Ammon's horn sclerosis and cerebellar lobular sclerosis were not seen. This has led Corsellis and Meldrum[11] to conclude that lasting anatomic sequelae of ECT are indeed mild. It should tinally be noted that the nonspecific neuropathologic changes that have been reported by Alpers and Larsen may have been secondary to the immediate cause of death in these patients rather than to the ECT.

The problem of extrapolating from animal studies to the clinical situation has been comprehensively discussed by Hartelius.[12] In his work, experimental conditions approximated clinical conditions. He found significant vessel wall and nerve cell changes as well as a glial reaction of the progressive type. He concluded that the majority of these changes are reversible and that irreversible changes occur mainly in those animals given "intensive" treatment.

It is generally agreed that the changes which are reported both in human subjects and animals are attributable to cerebral ischemia secondary to the seizure. For neuropathologic changes to occur because of the current itself, more intense milliamperage than that used therapeutically is required.

Brain damage has also been inferred from interictal and postictal EEG changes.[13] The induction of a seizure leads to a characteristic sequence of rhythmic high voltage spike and slow wave patterns. This is usually followed by many seconds of an isoelectric tracing and later by diffuse EEG slowing in bilateral ECT or lateralized slowing in unilateral ECT. Following the completion of treatment, the slower frequences gradually regress and are replaced by well-regulated alpha rhythms. The significance of these changes is not known but since they are reversible they are unlikely to be a relection of permanent brain damage.

The most widely publicized side effect of ECT is the associated amnesia. The amnesia has been shown to be unnecessary for the effectiveness of the treatment. Since the amnesia has been found to be primarily determined by the amount of current, the technique of ECT has been modified in various ways to reduce this undesirable effect. The electrical parameters of the current used has been changed to reduce the amount of energy and hence the memory disturbance. The use of a specific chemical convulsant (Indoklon) has also been explored but this has shown no significant advantages over electrical induction. The third modification has involved electrode placement. With unilateral ECT, a considerable reduction of amnesia and postictal confusion has been claimed. The ultimate consideration, however, is whether unilateral ECT is as effective as bilateral ECT. While several controlled studies[14] have concluded that the therapeutic effects of unilateral ECT are equivalent to bilateral ECT, this issue continues to be debated.

Although part of the amnesia for events occurring during and shortly before the treatment series is occasionally permanent, most patients find that their ability to acquire new information returns in two to three weeks if they have had up to 16 treatments in a series. Retrograde amnesia, involving recollection of remote personal events, nearly always resolves with the passage of time. Short-term memory returns to its pretreatment level within 4-6 hours.[15] Patients who receive a large number of treatments in a series may experience more significant memory effects both with respect to intensity and duration. The relative unimportance of functional impairment secondary to circumscribed memory loss will be especially evident when compared to the severe functional impairment produced by major and prolonged depressive illness. The net effect in these patients will thus be marked functional improvement.

## Clinical Considerations

As in all medical treatment, the decision to use a given intervention must be based on a comparison of the risks involved in the treatment and its potential benefit to the patient. The decision on whether to use ECT must ultimately rest on the prognosis of a severely depressed patient if ECT were withheld. It is not always recognized that nontreated depressed patients are often malnourished, subject to electrolyte imbalance, and susceptible to intercurrent infections and cardiovascular disease. Because of their lack of energy and self-deprecatory attitudes, they neglect to seek and at times refuse treatment not only for the depression itself but also for intercurrent illness. Avery and Winokur[16] have shown that mortality rates were significantly lower in severely depressed patients treated with ECT. In a recent careful analysis of 100 suicides, 70% suffered from well-established depressive illness.[17] In an article entitled "Depression: Schism in Contemporary Psychiatry," D'Agostino[18] reported on his own father's plight with depressive illness. The father received office psychotherapy, was admitted to three different hospitals without improvement on drugs and psychotherapy, and only obtained relief on admission to a fourth hospital when ECT was administered.

Despite its demonstrated benefits and effectiveness, ECT continues to be severely critized. This may, in part, be due to its historical and, occasionally, present day overutilization in conditions for which it is not indicated. Relevant surveys on patterns of utilization of ECT are few and careful monitoring within the profession is sometimes lacking. There may be, unfortunately, a lack of universal adherence to modern procedures of ECT. Until a few years ago, finanical constraints prevented certain institutions from using "modified" ECT. It was given in an "unmodified" form, or with a muscle relaxant only, a use which is attended by severe anxieties, panic, and discomfort. All these factors may invite legislative mandates that would severely restrict or abolish this treatment. Overly restrictive proposals would, however, effectively deprive those patients most in need of prompt and perhaps life-saving intervention. It is, therefore, incumbent upon the profession to encourage and even require the adoption of optimal standards in the practice of ECT.

For a dispassionate account of ECT by one who has experienced it, a paper published in the British Journal of Psychiatry is worth reading.[19] The author describes how the treatments were given, the memory disturbances experienced, and the response of his depression to ECT. He ends his account with the hope that it will help to ". . . dispel the erroneous belief that ECT is a terrifying form of treatment, crippling in its effect on the memory and in other ways. The technique is today so refined that the patient suffers a minimum of discomfort, and the therapeutic benefits are so great in those cases where it is indicated that it is a great pity to withhold it from mistaken ideas of kindness to the patient." Two crucial statements in this quotation stand out, ". . . in those

cases where it is indicated . . . ," a reminder to its over-enthusiastic adherents, and ". . . it is a great pity to withhold . . . ," a reminder to its incorrigible critics.

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# Florida Lung Association Accredited For Continuing Medical Education

**The Florida Lung Association has been accredited for continuing medical education by the Liaison Committee on Continuing Medical Education.**

**Upon the recommendation of the FMA Committee on Continuing Medical Education, which conducted a survey of the program early this year, the accreditation was made provisional for a two-year period. The Lung Association is the first voluntary health agency in Florida to be accredited.**

**Accreditation confers the right to sponsor or co-sponsor continuing medical education activities and to designate them for American Medical Association Category I Credit.**

**Since the national accreditation program began several years ago, 27 institutions and organizations have been accredited. The FMA Committee on Continuing Medical Education has performed the survey work in 13 of these cases.**

Abstract: New modes of therapy and some changes in the old standby regimens of anticonvulsant treatment have emerged in the past five years. While these advances seldom result in a cure for childhood epilepsy, it is clear that a significant benefit is realized by select patients. These benefits may involve a reduction in side effects, easier compliance with dosing or improved seizure control. Throughout this discussion the international classification of seizures is utilized.[1]

# Anticonvulsant Therapy in Childhood

## Recent Advances

Richard G. Curless, M.D.

### Phenytoin

Two areas deserve special attention when prescribing phenytoin (diphenylhydantoin, Dilantin) for children. The first involves the remarkable difference in metabolism when compared to the adult. There is extensive documentation in support of a long half life (15-20 hours) and relatively low volume of distribution in adults.[2-4] Since the half life is a good indicator of the dosing interval, most adults will have an adequate trough level with once a day dosing.

However, preliminary studies in children without the benefit of kinetic parameters suggested the possibility of a quite different pattern.[5] In this study a much higher dose and increased frequency of dosing was suggested. Recent work verified the earlier impression by the demonstration of very short half lives and a large volume of distribution in young patients.[6] It appears that most preschool children require a minimum of 10 mg/kg/day split into 3-4 doses. The studies indicated that a similar dose was needed in some early school age children as well. However, 5 mg/kg is recommended as a starting dose in this age group.

There is no question that the high initial dose is safe. It can be followed with a trough (lowest) blood level drawn just prior to a dose approximately two weeks after the initiation of therapy. The dosage can then be adjusted to respond to this value as well as clinical indications of failure (persistent seizures) or toxicity (ataxia or drowsiness). The cardinal rule of anticonvulsant therapy should be born in mind for this and all other treatment regimens. If seizures persist, increase the dose until the frequency of seizures is reduced or clinical side effects occur. In addition, however, avoid under-treating a patient who is seizure free. In young children the latter can only be accomplished by careful attention to adjusting the dose for weight increase and by the use of appropriate blood level analysis.

In addition, one study indicates an inability to obtain adequate phenytoin blood levels by the oral route in newborns.[7] The reason is unclear, but for the present large (10 mg/kg) IV doses are required for a prompt blood level with 10 mg/kg/day in divided doses utilized thereafter.

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## Phenobarbital

Early studies of phenobarbital kinetics in children suggest a long half life of 48 hours in most patients.[8] This suggests a safe once a day dosing schedule even in toddlers and preschool children. We are currently evaluating the practical application of this information in a large group of infants and toddlers. Until this or similar studies are released, a twice a day schedule should still be utilized.

Phenobarbital kinetics in newborns is quite different and requires a high parenteral loading dose of 15-20 mg/kg on the initial day.[7] Subsequently, however, no additional dosing may be necessary for two to four days due to a long half life. Blood levels must be utilized to indicate the timing for the next dose. This difference in kinetics may be the result of protein binding and distribution patterns peculiar to the newborn.

## Carbamazepine

This compound marketed as Tegretol has been used for the treatment of tic douloureux for many years. Since 1962 it has been prescribed in Europe for the management of epilepsy, and in 1974 was approved by the FDA for the same purpose in this country. Although official (FDA) approval for use in children has not been released, it is acclaimed by many as a valuable anticonvulsant in all age groups.[9, 12] This drug is effective in the control of grand mal, focal motor, and partial complex (psychomotor or temporal lobe) seizures in many patients. Some authors feel that it is the drug of choice in partial complex epilepsy. It is relatively ineffective in petit mal epilepsy and very little experience is available regarding its use with minor motor seizures of infancy. The recommended starting dosage is 15 mg/kg/day given twice a day with gradual increases up to 30 mg/kg/day if seizures continue and side effects are not significant.

Infrequent serious side effects have been reported in the more recent studies. The occasional incidence of bone marrow suppression indicated by a lymphopenia has been transient without discontinuing the drug. There are reports of severe bone marrow depression in adults, but no fatal case has been reported in the United States or Europe in any age group.[13, 14] However, at this stage of usage in the United States, a pretreatment and two month post-treatment blood count is advisable. A mild lymphopenia is not uncommon and should be rechecked with a subsequent blood count.[15] Other idiosyncratic reactions have been reported but the low incidence suggests a good risk/benefit ratio. Note that the drug company insert suggests more frequent blood counts for the first three months.

The striking advantages of this drug involve its relative freedom from the frequent idiosyncratic side effects of phenytoin (gingival hyperplasia, hypertrichosis, etc.). Most studies indicate some psychotropic benefit with improved behavior often described by family members as "brightening up," "much more alert," etc. In some cases this may be due to the substitution of carbamazepine for a relatively depressing drug such as mysoline or phenobarbital, but in either case the end result is often encouraging. It is felt by some authors that this drug can be considered as a second agent in the management of many epileptic children.[9] Phenobarbital remains the initial drug of choice in most generalized and focal motor (unilateral) seizures. Partial complex, absence (petit mal), or myoclonic seizures (infantile spasms) require more specific drug therapy at the onset.

## Diazepam Analogs

Two diazepam (Valium) analogs have demonstrable effectiveness as oral anticonvulsive agents. Nitrazepam (Mogadon) is not available in the United States and clonazepam (Clonopin) was released for use in adults and children three years ago.[16] Both drugs are of value in treating absence seizure and myoclonic seizures in older patients. Infantile spasms (myoclonic seizures of infancy) may respond temporarily, but a lasting benefit is unlikely. Brief absence attacks with or without a loss of motor tone, some of which have a photosensitive stimulus, may benefit from clonazepam. This drug is not generally useful for generalized major motor or partial complex seizures disorders. The principal side effect is drowsiness, although this is less of a problem in children than in adults.

As indicated in Carson's study, the dosage in children should start at 0.25 mg T.I.D. in small infants and 0.50 mg T.T.D. in older children.[16] These doses are increased by 0.25 mg and 0.50 mg respectively per dose every 2-3 days up to the average maintenance dose of 0.42 mg/kg/day assuming continued seizure activity without major side effects. The diagnosis, management, and prognosis of these patients is rather difficult and consultation with a neurologist interested in caring for children is strongly recommended.

## Valproic Acid

Valproic acid (sodium valproate, sodium dipropylacetate, Depakene) has been used in some European countries for six years and was released by the FDA in March 1978 as Depakene. It is the sodium salt of an unbranched fatty acid which was first noted in 1963 to protect rabbits and mice from pentatetrazol induced seizures. The mechanism for anticonvulsant activity differs from other anticonvulsants in that its effect is probably due to an increase in brain gamma-aminobutyric acid (GABA).[17]

The value of this drug in children and adults appears very encouraging.[18, 21] At a starting dosage of 15 mg/kg/day on a T.I.D. basis, it is highly recommended by some authors as an excellent anticonvulsant in the major motor epilepsies of childhood and in petit mal epilepsy. Patients with pure absence seizures (petit mal) or complex absence (absence mixed with motor phenomena) receive the most striking benefit. The myoclonic epilepsies, particularly the photosensitive ones, are also responsive to this drug. Available studies point out that partial/complex seizure patients do not benefit from valproic acid as much as other drugs. Authors differ, however, on the value in infantile spasms with one study pointing out high effectiveness and another very low value. In any case, some children have responded to this drug when other medications have failed.

Major side effects are infrequent with mild, often transient fatigue reported most frequently. A study of a large number of patients indicates that therapy was discontinued because of side effects in only 3% of patients. The most common complaints were drowsiness and gastrointestinal symptoms which cleared promptly when the drug was discontinued. No significant hematologic changes were noted. Liver dysfunction including hepatic failure resulting in fatalities has occurred in a few patients. A causal relationship has not been established, however liver function studies are recommended prior to therapy and every two months thereafter. A recent study suggests that a dose reduction may be sufficient to prevent hepatic side effects.[22] Other infrequent problems are listed in the drug insert; however, the risk/benefit ratio is very favorable.

Valproic acid potentiates the effect of barbiturates and benzodiazepines such that these drugs may need to be reduced in dosage. The possibility that concomitant valproic acid and clonzaepam may produce absence seizure status is strong enough to avoid this combination. Phenytoin metabolism is enhanced so that an increased dosage is often necessary to maintain an effective blood-tissue level.

In summary, it should be emphasized that these newer approaches do not change the basic rules of therapy in epilepsy. It is still important to obtain effective blood levels (or mild toxic symptoms) before changing drugs in a poorly controlled epileptic. Avoid multiple anticonvulsants (more than two) in most cases. Instruct patients about the danger of status epilepticus that can result from rapid withdrawal of therapy.

Phenobarbital remains the most appropriate initial treatment for major motor seizures in children. A dosage of 5 mg/kg/day should be utilized for up to three to four years of age and 2-3 mg/kg/day in older children. For cases that do not respond to phenobarbital alone, phenytoin or carbamazepine may be added. Recent studies point out the need to follow a different phenytoin dose plan for most young children and to observe blood levels carefully. Clonazepam should be reserved for young children with minor motor seizures such as infantile spasms and simple absence attacks, although occasionally patients with partial complex seizures may also benefit.

Sodium valproate may provide prompt relief of petit mal seizures and, in addition, is helpful in preventing major motor seizures. Most authors do not yet recommend it as the primary anticonvulsant in the major motor epilepsies. The risk/benefit ratio may be more favorable than ethosuximide (Zarontin) in the treatment of petit mal epilepsy. However, changing medications in a patient who is well controlled and not having difficulty with side effects is not recommended.

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**Abstract: Clinical investigation in family practice offers a distinct form of research activity — observing, recording, and analyzing personal or practice experience over a continuum. Research activities in family practice have generally been conducted in six major areas: patient care; epidemiology and environmental effects on health; behavioral and sociologic aspects of medicine; operational and managerial endeavors; education, and Peer Review.**

**In an attempt to ascertain the level of current research, interest and activity among the practicing and resident members of the Florida Academy of Family Physicians a survey was undertaken in September 1977. Nine hundred direct mail questionnaires were distributed with a 10% return rate. The data demonstrated a small but active cadre of experienced clinical investigators and a larger number of individuals interested in the research fields available to family practitioners within the state of Florida. Current developments within the departments of family practice in the medical schools in the state and this preliminary study demonstrate a significant potential for cooperative research among family practitioners in Florida.**

# Clinical Investigation in Family Practice

**Roman M. Hendrickson, M.D.**

Clinical investigation or research too often conjures up the idea of laboratory bench top experiments. Family practice offers another type of research activity — observing, recording and analyzing personal or practice experience over a continuum. Research in family practice may indeed be viewed as M. Wood has termed it, "organized curiosity," a way to pursue the many unanswered, unasked questions.[1]

The history of research in general/family practice is as old as the profession. William Jenner, a general practitioner in the late 1700's, carried out observations and experiments on the nature of smallpox in his practice for over 15 years.

According to a recent article by I. R. McWhinney: "The observation of the natural history of disease is the basic science of medicine. Laboratory sciences may explain disease but the clinician must first define and describe it, and this can only be done by clinical observations.

"The general practitioner has advantages as an observer which are shared by few other physicians. The general practitioner can follow illnesses from their beginning to their termination, even if the course is of many years duration, all variant of illness from the mildest to the most severe can be observed. The physician can, if he/she chooses, observe patients in their own natural habitat".[2]

Despite the unique opportunities for research activities in family practice, its relatively new status as a specialty discipline brings with it certain adherent disadvantages in developing a fund of well performed and accepted clinical research. Those individuals in leadership positions have, unlike many other specialties, come from the active clinical practice of medicine and not the academic fields. Academia in family practice is a new and developing entity only recently delineating the full scope

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of its involvement and responsibilities in the teaching of clinical family practice. Research activities within the field have necessarily lagged behind the prerequisite development of an infrastructure to support research activities once begun.

Valid and well performed clinical investigation may now be supported by the infrastructure which medical academia can provide. The medical centers and residency programs are beginning to have available through their departments of family practice sources of funding, biostatisticians, computer programmers, research design consultants and seasoned clinicians, all with an interest in developing, carrying out and processing data derived from clinical investigation obtained in a family practice setting.

Programs have begun to develop in the medical schools designed specifically for cooperative research projects which may be correlated through a central computer data base and processing system for a later analysis and discussion. Currently within Florida there is a department or section of family practice at each of the medical schools as well as 11 civilian and three military family practice residencies in the state with a total of 187 residents (excluding military).

The ideas of clinicians, generated through years of practice and a myriad of experiences, may now be offered for discussion, analysis and, if feasible, a clinical investigation of their applicability and validity in advancing the overall practice of medicine. Research opportunities in family practice have evolved in six basic areas:

1. Patient Care Research. — Included here is work concerned with diagnosis, disease management, therapeutics, natural presentation of disease and patient education.
2. Epidemiology and Environment Research. — Work here deals with descriptions of prevalence, incidence and risk factors in disease presentation.
3. Behavioral and Social Research.
4. Operational and Managerial Research. — This area produces papers concerning physician's practices, office and hospital practice, management techniques, record keeping methodologies, etc.
5. Educational Research. — Work in this category is directed at educational program development and assessment of educational endeavors.
6. Peer Review. — This area includes work done on self assessment, continuing medical education and chart audit review.

The key to any successful research project is an inquisitive mind and a desire to pursue and answer to a well formulated question in an orderly fashion. Each physician may now offer his unique interests, ability, and/or experiences in contributing to the overall generation of ideas and data essential to the production of quality clinical research. It is not necessary that an individual develop the idea for a research project, carry out the accumulation of data relative to that problem, and produce a valid clinical paper analyzing and summarizing his findings. The potential as well as the need for cooperative research ventures now exists.

In an attempt to ascertain existing research activity and interest in research, a survey of the practicing and resident members of the Florida Academy of Family Physicians was carried out by direct mail questionnaire in September 1977. A total of 800 questionnaires were mailed to practicing physicians and 100 to resident physicians. A total of 90 questionnaires were returned, 80 from practicing physicians and 10 from resident physicians.

The data requested and the results obtained are as below:

1. Have you ever been involved in a clinical trial?

| | | |
|---|---|---|
| Practicing Physicians | (36/80) | 45% |
| Resident Physicians | (6/10) | 60% |

2. Have you ever published an article or letter in a medical journal?

| | | |
|---|---|---|
| Practicing Physicians | (30/80) | 38% |
| Resident Physicians | (1/10) | 10% |

3. Are you currently involved in research activities?

| | | |
|---|---|---|
| Practicing Physicians | (8/80) | 10% |
| Resident Physicians | (2/10) | 20% |

4. Would you be interested in participating in a cooperative research project?

| | | |
|---|---|---|
| Practicing Physicians | (39/80) | 49% |
| Resident Physicians | (7/10) | 70% |

5. How many hours per week would you be interested in devoting to research activities?

| | |
|---|---|
| Practicing Physicians | 4 hour average |
| Resident Physicians | 3 hour average |

6. Would you be willing to involve your patients in:

A. Drug trials:

| | | |
|---|---|---|
| Practicing Physicians | (39/80) | 49% |
| Resident Physicians | (5/10) | 50% |

B. X-ray — Blood studies:

| | | |
|---|---|---|
| Practicing Physicians | (37/80) | 46% |
| Resident Physicians | (6/10) | 60% |

7. Would you be interested in completing occasional research questionnaires not to exceed one per month?

| | | |
|---|---|---|
| Practicing Physicians | (60/80) | 75% |
| Resident Physicians | (9/10) | 90% |

8. Do you have any ideas for research or areas of special interest?

| | | |
|---|---|---|
| Practicing Physicians | (24/80) | 30% |
| Resident Physicians | (2/10) | 20% |

The data generated by this preliminary study would appear to indicate a small but perhaps growing cadre of

experienced and interested clinical researchers in family practice within Florida. The result of this preliminary study has prompted the Florida Academy of Family Physicians to request from its new members responses to the aforementioned questions in an attempt to maintain an up-dated list of those interested in participating in clinical research. This resource has been identified; the potential to support valid research activities, both individual and cooperative, has been made manifest; it is now up to those interested in producing quality research endeavors to organize the resources and set about the production in an ongoing fashion of well performed clinical investigations in those areas of interest to family practitioners.

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**Associate Editor's note:** Someone once observed that "the knowledge hidden in the clinical files of the country doctor is a virtual gold mine for understanding the natural history of disease." In recognizing that truth, Dr. Hendrickson has attempted to stimulate the Family Physicians of Florida to share! — E. Charlton Prather, M.D.

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# ACP, FSIM Plan Annual Joint Meeting At Innisbrook in September

**The 11th Annual Joint Meeting of the Florida Region of the American College of Physicians and the Florida Society of Internal Medicine will be conducted September 21-23 at Innisbrook in Tarpon Springs.**

**A scientific program has been arranged by the ACP under the direction of James E. McGuigan, M.D., Professor and Chairman of the Department of Medicine at the University of Florida College of Medicine.**

**The FSIM has put together a socio-economic program, with James L. Borland Jr., M.D., of Jacksonville, serving as Chairman.**

**Information about the meeting may be obtained by contacting Charles K. Donegan, M.D., ACP Governor for Florida, 501 11th Street North, St. Petersburg 33705.**

**Abstract: The peripheral conversion of thyroxine to triiodothyronine in the liver may be markedly impaired in a variety of acute and chronic illnesses. In a 53-year-old woman having an evevated thyroxine, severe congestive heart failure and chronic passive congestion of the liver resulted in almost total inhibition of the peripheral conversion of $T_4$ to $T_3$ with resultant subnormal to undetectable serum total $T_3$ levels. Repeated determinations of serum $T_3$ before and after recovery from the nonthyroidal illness were required to definitively establish the diagnosis of hyperthyroidism.**

# Hyperthyroidism or "Sick Euthyroid Syndrome" A Diagnostic Dilemma

**Edward B. Biederman, M.D.**
**Gerald S. Levey, M.D.**

The peripheral conversion of thyroxine ($T_4$) to triiodothyronine ($T_3$) in the liver may be markedly impaired in euthyroid patients with nonthyroidal illness.[1-4] As a consequence the serum concentrations of total or free $T_3$ are lower than normal and frequently subnormal in these patients. Total and free $T_4$ levels are variable and may be increased, normal, or occasionally decreased. Patients having nonthyroidal illness and impaired peripheral conversion of $T_4$ to $T_3$ have usually been proven to be euthyroid even in the setting of elevated total and free serum $T_4$ concentrations, a circumstance known as the "sick euthyroid syndrome."*

In a patient having an elevated serum total $T_4$, described below, severe congestive heart failure and chronic passive congestion of the liver resulted in almost total inhibition of the peripheral conversion of $T_4$ to $T_3$ with resultant subnormal to undetectable serum total $T_3$ levels. The disparity in serum $T_4$ and $T_3$ concentrations posed an extraordinary diagnostic dilemma in distinguishing hyperthyroidism from the "sick euthyroid syndrome." Repeated determinations of serum $T_3$ before and after recovery from the nonthyroidal illness were required to definitively establish the diagnosis of hyperthyroidism.

## Case Report

A 53-year-old white woman was admitted to Jackson Memorial Hospital with uncontrolled atrial fibrillation, congestive heart failure, and anasarca. During the six months prior to admission she noted nervousness and palpitations but no other symptoms of hyperthyroidism. She denied any previous history of thyroid disease or other illness. She was not taking any medications and there was no antecedent administration of radiologic contrast media.

On physical examination the patient was somewhat hyperkinetic and had massive anasarca. The blood pressure was 110/60 mm Hg, there was an irregular apical pulse in excess of 200/minute, an oral temperature of 37 C, and a respiratory rate of 16/minute. The skin temperature appeared to be normal. There was a mild ocular stare and lid lag. The thyroid gland was slightly

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*Levy, R.P., Thyroid Function Tests Results in Non-thyroidal Illness. Clinical Day Program, 53rd Annual Meeting American Thyroid Association, Cleveland, Ohio, September 7, 1977.

enlarged and its weight was estimated to be 30 g; a bruit was not audible. Neck vein distension was present at 30°. Basilar rales were present in both lungs. There was anasarca involving all extremities, breasts, and massive ascites which precluded palpation of the liver and spleen. There were no focal neurologic signs but the patient had a mild tremor of her hands.

Admission laboratory data were normal except for a BUN of 32 mg/dl and a prothrombin time four seconds above control. An electrocardiogram showed atrial fibrillation with a ventricular response of 200/minute. Chest x-ray showed early interstitial edema.

Treatment was begun with digoxin and furosemide. The diagnosis of hyperthyroidism was considered and thyroid function tests performed on an emergency basis. Results of thyroid function tests obtained on admission and subsequent tests are shown in Table 1. The discrepancy between the serum $T_4$ and serum $T_3$ on day 1 suggested the possibility of "sick euthyroid syndrome," a diagnosis which seemed more tenable on day 2 and day 4 as the serum $T_3$ declined to undetectable levels. A 24-hour $^{131}I$ uptake was 14% with a normal scan. Thyrotropin releasing hormone (500 ug, IV) did not promote the release of TSH; serum TSH was 3.6 μU/ml before and 4.2 μU/ml 30 minutes after injection. On day 8 the patient was improved as judged by a decreased apical rate 96/min) and a diuresis of 18 kg. A serum $T_3$ was 227 ng/dl on day 8 and 270 ng/dl on day 17. Due to continued striking clinical improvement, apparent normal sensitivity to digitalis, and a decline in serum $T_4$ to 15.4 and $T_3$ resin uptake to normal (34%) no therapy was directed at what had been considered a likely underlying hyperthyroidism. The patient lost approximately 40 kg in weight in one month. On days 33-35, there was progressive loss of control of the atrial fibrillation with the ventricular rate increasing to 190/minute. Serum $T_4$ was 16.5 μg%, $T_3$ resin uptake 43%, serum $T_3$ 324 ng/dl, and 24-hour $^{131}I$ uptake 57%. At this time the patient had no evidence of congestive heart failure, passive congestion of the liver or anasarca. She was given 7 mCi $^{131}I$ as treatment for hyperthyroidism followed 5 days later by propylthiouracil 150 mg every six hours by mouth.

**Table 1. — Thyroid Function Tests.**

| Day | Serum $T_4$ μg/dl (6 - 12.5) | $T_3$ Resin Uptake - % (22 - 34) | Serum $T_3$ ng/dl (80 - 220) | 24-hr $^{131}I$ Uptake - % (1 - 30) | TSH μU/ml (0 - 10) |
|---|---|---|---|---|---|
| 1 | 17.1 | 62 | 126 | — | |
| 2 | — | — | 62 | 14 | |
| 4 | — | — | <25* | — | 3.6 |
| 8 | 17.5 | 38 | 227 | — | |
| 17 | 15.4 | 34 | 270 | — | |
| 35 | 16.5 | 43 | 324 | 57 | |

*<25 = Undetectable

## Discussion

The recent advent of the radioimmunossay for serum $T_3$ has provided extraordinary information regarding thyroid hormone metabolism. Patients with liver disease and a variety of acute and chronic nonthyroidal illnesses may have a block in the peripheral conversion of $T_4$ to $T_3$ resulting from an acute or chronic illness independent of, or related to, the hyperthyroidism. Cases of $T_4$-hyperthyroidism ($T_4$-toxicosis) with normal or low serum $T_3$ concentrations in the presence of nonthyroidal illness have been reported from Switzerland,[5] Australia,[6,7] and New Zealand.[8] In many of the cases of $T_4$-toxicosis ensued following the administration of iodine-containing medication or radiologic contrast media.[5,7-9]

In the present case, the signs and symptoms of hyperthyroidism were quite mild, and the predominant clinical problem was atrial fibrillation, congestive heart failure, and passive congestion of the liver. The suspicion of hyperthyroidism led to determination of thyroid hormone levels. The combination of elevated serum $T_4$, subnormal to undetectable serum $T_3$, and the absence of prior administration of iodine-containing materials seemed compatible with a diagnosis of "sick euthyroid syndrome;" chronic passive congestion of the liver presumably was responsible for the inhibition of $T_4$ to $T_3$ conversion. Although the 24-hour $^{131}I$ uptake was normal at 14% in the presence of anasarca, much of the dose may have been sequestered in the edema fluid. The failure of TSH release in response to thyrotropin-releasing hormone (TRH) was compatible with, but not necessarily diagnostic of, hyperthyroidism since euthyroid sick patients may not respond to TRH.[5,10-11] Repeated monitoring of the serum $T_3$ levels during the period of recovery from the congestive heart failure and passive congestion of the liver finally established the diagnosis of hyperthyroidism in the present case.

Although the mechanism is not understood, elevations of the serum total and free $T_4$ in the "sick euthyroid syndrome" are not uncommon.[4,6] Since serum total $T_3$ determinations are routinely available, it appears likely that an increasingly frequent number of cases will be discovered with the thyroid function profile and subsequent diagnostic dilemma depicted in our case. It seems prudent, therefore, to closely monitor all patients with severe nonthyroid illness having elevated serum total or free $T_4$, regardless of the initial serum $T_3$ level, and firmly establish that the serum $T_4$ and serum $T_3$

return to normal levels once the intercurrent illness has resolved. This should prevent subsequent complications from an underlying hyperthyroidism temporarily masked by the block in peripheral conversion of $T_4$ to $T_3$. Alternatively, in order to adhere to optimal cost-effectiveness it may be wiser to defer $T_3$ radioimmunoassay determinations until after the acute nonthyroidal illness has improved.


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# American Academy of Dermatology Introduces New Journal

**The brand new *Journal of the American Academy of Dermatology* makes its debut this month under the editorship of J. Graham Smith Jr., M.D.**

**The first issue contains articles on crab larvae attacking swimmers in Chesapeake Bay; and research that shows some brands of soap cause more skin irritation than other brands. A standard monthly feature will be a continuing education article and self-assessment test. Each issue will contain about 100 pages.**

**The Academy's Board of Directors decided to develop a journal after a survey of the organization's 5,000 members showed high popularity of journal reading as a source of CME.**

**Editor Smith is Professor and Chairman of the Department of Dermatology at the Medical College of Augusta. The publisher is the C. V. Mosby Company of St. Louis.**

**Abstract: Antiepileptic drug (AED) monitoring has become part of the routine management of patients with seizures. It has increased the efficacy and safety of medical management. AED monitoring is helpful in assessing compliance, in preventing toxic side effects and in individualizing therapy. The technique of choice for measuring AED levels is gas-liquid chromatography. This offers a high degree of accuracy and specificity for the determination of the more commonly used antiepileptic drugs. The interpretation of AED plasma levels should be based on an understanding of total versus free drug plasma levels, therapeutic range, drug half-life, and time to reach steady state levels. When antiepileptic drugs are used in combinations interactions are to be anticipated to prevent adverse effects.**

# Antiepileptic Drug Monitoring

J. Bruni, M.D. and B. J. Wilder, M.D.

Antiepileptic drug (AED) monitoring has become part of the routine management of the patient with epilepsy. In conjunction with clinical judgment it can reduce the number of uncontrolled epileptic episodes and achieve maximal benefit from therapy. Additionally monitoring increases the safety of medical management of epilepsy and facilitates individualization of therapy. This article reviews the theoretical basis for monitoring, its indications and techniques, and therapeutic plasma (or serum) levels that should be achieved.

## Theoretical Basis

Biological activity is proportional to the amount of the antiepileptic drug that reaches central nervous system "receptors." This is in dynamic equilibrium with plasma drug concentration; thus the plasma level is a better guide to antiepileptic effect than the drug dose. A correlation also exists between plasma levels and dose-related adverse effects. Multiple factors can produce individual variations in drug levels, thus estimation of plasma levels allows determination of bioavailability in an individual patient.

AED plasma determinations are helpful clinically in measuring compliance, preventing dose-related toxic side-effects, individualizing therapy, and achieving a "therapeutic range" for each patient. Plasma monitoring may also be helpful in alerting the physician to the presence of possible drug interactions when the patient is on multiple therapies.

Lack of correlation between the administered dose of a drug and its plasma level may be due to multiple factors.[1–3]

These include:

1. Individual differences in absorption, volume of distribution, biotransformation, and/or excretion.
2. Noncompliance
3. Differences in nature of formulation of drug altering bioavailability (e.g., suspension versus capsule)
4. Presence of disease states, such as gastrointestinal, hepatic or renal disease, interfering with absorption, metabolism or excretion.
5. Abnormal protein binding.

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6. Drug interactions.
7. Environmental factors.
8. Unknown genetic factors
9. Saturation kinetics of some antiepileptic drugs such as phenytoin. In such instances plasma concentrations of phenytoin may increase disproportionally with increasing dose.

## Indications for AED Monitoring

The indications for AED monitoring follow from previously mentioned considerations. These can be summarized as:

1. At initiation of therapy to determine if a satisfactory plasma level has been achieved.
2. When seizures are uncontrolled to determine compliance, rapid drug metabolism, or whether epilepsy is resistant to that drug.
3. When AED dose is changed.
4. During development of intercurrent illness such as hypoproteinemia, gastrointestinal, hepatic or renal disease.
5. If toxic symptoms occur which may be drug related.
6. When unexplained behavioral changes occur which may be secondary to subtle drug toxicity.
7. When a drug interaction is suspected.
8. During pregnancy when alterations in AED absorption and metabolism may occur requiring an adjustment of dosage.[4]
9. When factors are present which modify AED response at receptor sites—e.g., electrolyte or acid-base disturbances, anoxia.
10. During prepuberty-puberty when changes in drug metabolism occur which may require adjustment.
11. During antiepileptic drug research trials.

## Techniques of AED Monitoring

The technique of choice for measuring AED levels is gas-liquid chromatography (GLC). This offers a high degree of accuracy and specificity and in addition allows for the simultaneous determination of several drugs. Phenytoin, primidone, phenobarbital, carbamazepine, ethosuximide and valproic acid can be measured by GLC.[5,6] Previously, less sensitive or more complicated spectrophotometric[7] and colorimetric[8] methods were employed.

At present radioimmunoassays and enzyme immunoassays are being evaluated for measuring the levels of several antiepileptic drugs-phenytoin, phenobarbital, carbamazepine, primidone and diazepam. High pressure liquid chromatography[9] and gas chromatography-mass spectrometry[10] are also being evaluated; however, these are not readily available for most clinical laboratories.

Drug assays performed by most laboratories measure the total (protein-bound plus unbound) and not only the free (unbound) biologically active plasma concentration. This limitation has to be recognized since it is only the free drug that can act at receptor sites. Toxicity also correlates better with free drug rather than with total concentrations.[3,11] This requires special consideration in the presence of hypoproteinemia, hepatic or renal disease. Hepatic disease may lead to a decrease in plasma protein binding of phenytoin, carbamazepine, or valproic acid with a subsequent change in metabolism. In uremia alterations in protein binding may also occur. However, in addition decreased renal excretion of such drugs as phenobarbital may theoretically occur. Low serum protein concentrations could lead to lower total phenytoin levels, which are partially counteracted by an increase in the free portion of phenytoin.

The optimal potential of AED monitoring has yet to be achieved. More significance can be derived from plasma levels when laboratories will be able to routinely measure free drug concentrations. The possibility of measuring salivary AED levels as indicators of free drug in plasma is being investigated.[12,13]

## Concept of Therapeutic Range

The concept of a therapeutic range is a statistical one. It represents the range of plasma drug levels associated with optimal seizure control in the majority of patients without the production of unacceptable adverse side effects. Some patients' epilepsy can be controlled with "subtherapeutic" levels; their dose should not be increased to treat the plasma level. In some patients toxic side effects may occur with subtherapeutic or therapeutic levels. If side effects are unacceptable, the dose of that AED should be reduced or another drug introduced.

Adverse drug interactions may occur when antiepileptic drugs are used in combination.[14,15] Isoniazid, chloramphenicol, dicoumarol, and disulfiram may elevate phenytoin levels; diazepam, ethanol, clonazepam and carbamazepine may lower phenytoin levels. Drugs whose biologic effects may be reduced by antiepileptic drugs include coumarins, vitamin D, doxycycline, diazepam, steroids, contraceptive pill, digitoxin, phenylbutazone, and nortriptyline. Valproic acid may lead to elevated phenobarbital levels or transiently decrease phenytoin plasma levels.[16]

Relevant pharmacokinetic data on the major antiepileptic drugs are provided in the Table 1.

**Table 1. — Pharmacologic Parameters of Major Antiepileptic Drugs.**

| Drug | Half-Life (hrs.) | Time to Reach Steady State (days) | Therapeutic Plasma Level (ug/ml)* | Protein Binding (%) |
|---|---|---|---|---|
| Phenytoin | 10-40 (dose dependent) | 7-9 | 10-20 | 70-95 |
| Primidone+ | 6-18 | 4-7 | 7-15 | 0 |
| Phenobarbital | 50-150 | 14-21 | 20-45 | 40-60 |
| Carbamazepine | 12-35 | 3-4 | 4-10 | 70-80 |
| Ethosuximide | 20-60 | 7-10 | 40-100 | 0-10 |
| Valproic Acid | 8-12 | ? | 50-100 | 90-95 |

*Epilepsy Research Laboratory, Epilepsy Research Foundation of Florida, Gainesville
+Metabolized to phenobarbital and phenylethylmalonamide, both of which have antiepileptic properties. May be guided by derived phenobarbital.

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*Florida's Department of Health and Rehabilitative Services offers through the Epilepsy Purchase of Service Program diagnosis and evaluation, anticonvulsant drug levels, casework services, counseling, transportation and information and referral to persons with epilepsy and persons with symptoms of having epilepsy. Eligibility is based primarily on income and family size.*

*Free anticonvulsant medication is available to indigent persons with epilepsy through the Epilepsy Control Program at the county health departments.*

*Further information about either program is available from your district HRS office, local Epilepsy Chapter or the Developmental Disabilities Office, 1311 Winewood Blvd., Bldg. 5, Tallahassee, Florida 32301 or call (904) 488-4257.*

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**The discovery of what one really likes is not as easy as it sounds. It involves the discovery of oneself, a laborious and frequently painful business.**

**Clifton Fadiman**

# A reminder

# ZYLOPRIM®
## (allopurinol)

100 and 300 mg scored Tablets

- inhibits uric acid formation
- helps prevent urate crystal depositions in synovia
- reduces risk of uric acid lithiasis

**INDICATIONS AND USE: This is not an innocuous drug and strict attention should be given to the indications for its use. Pending further investigation, its use in other hyperuricemic states is not indicated at this time.**

Zyloprim® (allopurinol) is intended for:

1. treatment of gout, either primary, or secondary to the hyperuricemia associated with blood dyscrasias and their therapy;
2. treatment of primary or secondary uric acid nephropathy, with or without accompanying symptoms of gout;
3. treatment of patients with recurrent uric acid stone formation;
4. prophylactic treatment to prevent tissue urate deposition, renal calculi, or uric acid nephropathy in patients with leukemias, lymphomas and malignancies who are receiving cancer chemotherapy with its resultant elevating effect on serum uric acid levels.

**CONTRAINDICATIONS:** Use in children with the exception of those with hyperuricemia secondary to malignancy. The drug should not be employed in nursing mothers.

**Patients who have developed a severe reaction to Zyloprim should not be restarted on the drug.**

**WARNINGS:** ZYLOPRIM SHOULD BE DISCONTINUED AT THE FIRST APPEARANCE OF SKIN RASH OR ANY SIGN OF ADVERSE REACTION. In some instances a skin rash may be followed by more severe hypersensitivity reactions such as exfoliative, urticarial and purpuric lesions as well as Stevens-Johnson syndrome (erythema multiforme) and very rarely a generalized vasculitis which may lead to irreversible hepatotoxicity and death.

A few cases of reversible clinical hepatotoxicity have been noted and in some patients asymptomatic rises in serum alkaline phosphatase or serum transaminase have been observed. Accordingly, periodic liver function tests should be performed during the early stages of therapy, particularly in patients with pre-existing liver disease.

Patients should be alerted to the need for due precautions when engaging in activities where alertness is mandatory.

Nevertheless, iron salts should not be given simultaneously with Zyloprim. This drug should not be administered to immediate relatives of patients with idiopathic hemochromatosis.

**In patients receiving Purinethol® (mercaptopurine) or Imuran® (azathioprine), the concomitant administration of 300-600 mg of Zyloprim per day will require a reduction in dose to approximately one-third to one-fourth of the usual dose of mercaptopurine or azathioprine. Subsequent adjustment of doses of Purinethol or Imuran should be made on the basis of therapeutic response and any toxic effects.**

*Usage in Pregnancy and Women of Childbearing Age.* Zyloprim® (allopurinol) should be used in pregnant women or women of childbearing age only if the potential benefits to the patient are weighed against the possible risk to the fetus.

**PRECAUTIONS:** Some investigators have reported an increase in acute attacks of gout during the early stages of allopurinol administration, even when normal or subnormal serum uric acid levels have been attained.

It has been reported that allopurinol prolongs the half-life of the anticoagulant, dicumarol. This interaction should be kept in mind when allopurinol is given to patients already on anticoagulant therapy, and the coagulation time should be reassessed.

A fluid intake sufficient to yield a daily urinary output of at least 2 liters and the maintenance of a neutral or, preferably, slightly alkaline urine are desirable to (1) avoid the theoretic possibility of formation of xanthine calculi under the influence of Zyloprim therapy and (2) help prevent renal precipitation of urates in patients receiving concomitant uricosuric agents.

Patients with impaired renal function require less drug and should be carefully observed during the early stages of Zyloprim administration and the drug withdrawn if increased abnormalities in renal function appear.

In patients with severely impaired renal function, or decreased urate clearance, the half-life of oxipurinol in the plasma is greatly prolonged. Therefore, a dose of 100 mg per day or 300 mg twice a week, or perhaps less, may be sufficient to maintain adequate xanthine oxidase inhibition to reduce serum urate levels. Such patients should be treated with the lowest effective dose, in order to minimize side effects.

Mild reticulocytosis has appeared in some patients.

As with all new agents, periodic determination of liver and kidney function and complete blood counts should be performed especially during the first few months of therapy.

**ADVERSE REACTIONS:**

*Dermatologic:* Because in some instances skin rash has been followed by severe hypersensitivity reactions, it is recommended that therapy be discontinued at the first sign of rash or other adverse reaction (see WARNINGS). Skin rash, usually maculopapular, is the adverse reaction most commonly reported.

Exfoliative, urticarial and purpuric lesions, Stevens-Johnson syndrome (erythema multiforme) and toxic epidermal necrolysis have also been reported.

A few cases of alopecia with and without accompanying dermatitis have been reported.

In some patients with a rash, restarting Zyloprim (allopurinol) therapy at lower doses has been accomplished without untoward incident.

*Gastrointestinal:* Nausea, vomiting, diarrhea, and intermittent abdominal pain have been reported.

*Vascular:* There have been rare instances of a generalized hypersensitivity vasculitis or necrotizing angiitis which have led to irreversible hepatotoxicity and death.

*Hematopoietic:* Agranulocytosis, anemia, aplastic anemia, bone marrow depression, leukopenia, pancytopenia and thrombocytopenia have been reported in patients, most of whom received concomitant drugs with potential for causing these reactions. Zyloprim® (allopurinol) has been neither implicated nor excluded as a cause of these reactions.

*Neurologic:* There have been a few reports of peripheral neuritis occurring while patients were taking Zyloprim. Drowsiness has also been reported in a few patients.

*Ophthalmic:* There have been a few reports of cataracts found in patients receiving Zyloprim. It is not known if the cataracts predated the Zyloprim therapy. "Toxic" cataracts were reported in one patient who also received an anti-inflammatory agent; again, the time of onset is unknown. In a group of patients followed by Gutman and Yü for up to five years on Zyloprim therapy, no evidence of ophthalmologic effect attributable to Zyloprim was reported.

*Drug Idiosyncrasy:* Symptoms suggestive of drug idiosyncrasy have been reported in a few patients. This was characterized by fever, chills, leukopenia or leukocytosis, eosinophilia, arthralgias, skin rash, pruritus, nausea and vomiting.

**OVERDOSAGE:** Massive overdosing, or acute poisoning, by Zyloprim has not been reported.

**HOW SUPPLIED:** 100 mg (white) scored tablets, bottles of 100 and 1000; 300 mg (peach) scored tablets, bottles of 30, 100 and 500. Unit dose packs for each strength also available.

*Complete information available from your local B. W. Co. Representative or from Professional Services Department PML.*

U.S. Patent No. 3,624,205 (Use Patent)

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SPECIAL ARTICLES

**Abstract: The author relates his personal experience as to the rewards received in the private practice of medicine. He traces these first through the educational and early years in practice, next through those spent in a busy group practice, and finally, into his return to solo practice. He found that the emotional rewards of a small personal practice outweigh the financial ones and the prestige of a large professional association.**

# Home is the Healer

**John J. Fisher, M.D.**

I remember how excited I was when, in Physical Diagnosis near the end of my second year in medical school, I was allowed to go to a hospital and see real patients. Sometimes one of them would call me "doctor" although, after having seen dozens of such groups come through the wards and having patiently endured their percussions of his chest, he knew full well I was just a medical student.

The following year I signed up as an extern in a general hospital serving a small steel mill town. Many nights found me its only available doctor. Every other Friday marked not only payday night but the advancement of my surgical education in the emergency room. Much as science advances with each major war, so necessity taught me. Whenever the emergency room nurse summoned me, I would ask her what each case looked like to her. I would then hurriedly read that chapter in Christopher's Minor Surgery and advance on the unsuspecting patient. If the diagnosis turned out to be other than my nursing counterpart had promised, I would excuse myself "to start an intravenous on the floor" and race to my room to read the applicable chapter before returning to try out such newly acquired knowledge.

During my intern year, when we were allowed one night off in seven and that after the supper hour, as I rotated through the various services I was certain that each was that specialty for my life's work.

I took a position as a paid house physician while awaiting my approved residency to begin. An old country doctor who boasted grandfather surgical privileges but little surgical talent or training would slip me $25 for scrubbing with him and doing his gallbladders, hernias, and appendectomies. My wife and I would splurge on these windfalls.

During my year as chief resident, I sent my family

back home from Baltimore so I could stay at the hospital every night and not miss anything. I second called my assistant residents, stole the good cases, and talked medicine with my interns or any staff man who happened in.

My first five years in practice were solo. I attended all the clinics and every department meeting, assisted anyone who would have me in surgery, took emergency call through the county's switchboard as long as the patient was female, and did anything to be busy with medicine until my practice grew. If I got paid, fine; if not, it was experience. If I had been wealthy, I would have paid for that experience.

After five years of satisfying my love for medicine, I joined with a partner so I might take my first vacation. Happily I chose the right man, one who had chosen medicine for the same reasons as had I. Although our practice grew, we met each morning and all patients were still each's patient. The times were changing, however, and new hospitals were opening and the patient list was getting even longer. One could not handle it all when the other was on vacation. We made the mistake of equating the size of one's practice with success and decided on a third man, and in a few years a fourth.

Our breakfast conferences about mutual patients were replaced by corporate business meetings. We met with CPA's and investment counselors, having to block out time from treating patients to do so. We concerned ourselves with discussions of how to keep our fees and income maximal and our salaries and office overhead minimal. We drew entertainment lists on the basis of who might help the corporation rather than upon purely personal friendship.

The questions I was being asked by the residents were not about my clinical experience but rather about how we handled the various financial matters of a large successful group practice, how we scheduled our time off, and what retirement plans were best to set up.

We stood call on schedule. Many times I not only did not recognize the patient at the other end of the telephone line but not even by sight when I met her in the labor room later. Some patients who came in for postoperative visits, even after major surgery, were total strangers.

I engaged in many extracurricular attempts to recapture some of what I had lost from my practice of medicine. I learned that neither politics, nor civic activities, nor even missionary medicine could replace my lost love.

Maybe it took the professional menopause, although I like to think it more simply as a return to my original values of a life in medicine, but I made the break back into a solo private practice. Once again I have my own office team and a patient list each day of people who want to see **me**, who are coming to **me** for help with their problems. I have discovered why Marcus Welby wears his Mona Lisa smile. I look forward to the office each morning, perform surgery only after extensive evaluation of the case, and return home each night as rested as when I left that morning. Even after a full days work I find myself with energy to take the children into the pool or down to the beach or to spend the evening building their, and my, characters.

I treasure my weekends without interruptions, now that I have given up obstetrics, but I am anxious to get back to my medical life each Monday. While I pay little attention to finances, allowing my office nurses to run that end of it, my overhead seems to be met and I take the same draw as I received from my previous corporation. My practice "worries" are now whether to choose hormones or chemotherapy for that advanced gynecological cancer, and whether medical or surgical therapy is best in this case of endometriosis.

Once again I recognize patients on the street or in restaurants. I feel that I accomplish things each day not for a financial statement but for a much bigger reckoning beyond. I sleep well each night, lying down with the satisfaction that my community, at least those members of it I saw that day, is better off for my having been here. I no longer can imagine retirement from medicine except for reasons of physical or mental impairment.

Those of you who have never departed from the high ideals of our noble profession, accept this repenter back into your midst.

● Dr. Fisher, 820 Prudential Dr., Suite 610, Jacksonville, Florida 32207.

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**The best way to forget your own problems is to help someone else solve theirs.**

# Medical Care of Injured Workers

James F. Richards Jr., M.D.

There are many ways in which the medical management of worker's compensation cases is unique. The simple relationship between doctor and patient, so gratifying to both individuals in the usual practice of medicine, is complicated in the worker's compensation injury by the intrusion of third parties. Any private medical case can be made difficult by the personalities of the physician himself, or of the patient, with the psychological phenomenon of tranference and counter-transference which always occurs between doctor and patient.

In the worker's compensation case, other parties actions and opinions and comments play a large role. These include the employer, the attorney, the compensation carrier, the Industrial Claims Judge, the Industrial Commission that sets the policy, the Legislature which writes the rules and regulations by which worker's compensation is guided, the labor union and the presence of medical quacks whose treatment and opinions sometimes result in the need for another opinion and yet another opinion and litigation to seek the truth in the case.

Private patients, though covered by insurance for medical and surgical expenses, most often do not have disability benefits. This single fact makes it much easier to return such injured or ill individuals back to gainful employment. Most private patients with insurance do not have complete coverage for all medical and surgical expenses, whereas compensation patients do, even though these payments may be below usual and customary charges. This, of course, means that the compensation patient has to invest nothing in his case, whereas most private patients do have to invest something. Not only do they contribute to their insurance premiums, which fact they often forget, but they also have to pay something in addition to the allowance their insurance provides. We see a much stronger motivation to return to work among injured private patients, even though partially disabled, than we do in the average compensation patient.

Self-employed patients are among the easiest to return to gainful employment. Some companies resist, or refuse to permit, the return of the injured workman to the job until he has a full and completely unrestricted work release slip. This is unfortunate because many of our patients would be able to return to lighter work if it were available and this light work would be beneficial. Nothing is more destructive than to have an individual sit and do nothing. I would much rather see the injured workman putting in his time and feeling useful while he is healing than lying around at home unable to do anything of value to anyone.

Some companies or employers, because of labor union contracts, find it difficult to replace a man into the company workforce when that would require a change in job or change in position. This is unfortunate. Many companies refuse to risk providing work for incompletely recovered workmen for fear of assuming additional liability, and thereby increasing their insurance premium. Compensation patients frequently resist returning to work for fear of losing benefits and future coverage. They may resist for fear of being fired, either immediately or in the near future. Some companies are notorious for this practice and the employees become quite aware of it.

Occasionally, employers or carriers dispute the history of injury so as to avoid responsibility for medical coverage. As a result, an atmosphere of distrust is created, adversely influencing the patient's will to recover and his desire to return to work.

Private patients are usually fairly aware of the benefits as well as the limitations of their insurance.

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Dr. Richards is former Chairman of the FMA Council on Medical Economics.

Compensation patients are most often unaware of rights and provisions of worker's compensation insurance coverage. They frequently seek attorney's advice simply because of this ignorance. In many cases, expert legal advice may not be needed in this system that is supposed to be self-executing. All of us who treat work related injuries are aware that an occasional patient with attorney is much slower to recover, and they have, on occasion, admitted that they have been coached by attorneys in what to say and how to react to examinations.

It is generally accepted that compensation patients require a great deal more paper work, filling out specific forms, providing periodic progress notes. There are many occasions in the treatment of the injured workmen when the doctor or his office personnel must respond to questions from carriers, attorneys, etc. Such dialogue is not generally required in the treatment of a private patient. Usually conversation between the treating physician and his patient or family is sufficient to maintain good rapport.

In private patients, the physician looks to the patient for full payment of his expenses, whether he has insurance or not. In the worker's compensation case, the physician is prohibited by law from charging the patient anything more than that which is covered by the rigid worker's compensation fee schedule set by the state agency. It is unfortunate that this fee schedule, grossly inadequate in many areas, causes many good physicians to refuse to care for the industrially injured patient. In Florida, the infrequency of adjustments in the fee schedule, gained only upon demand by the medical profession, results in requests for rather large increments. Of course, the greater the increment, the more emotional the response on the part of the state agency, the insurance carriers, and the employers of the state who feel that the medical profession's demands are greater than justified.

Physicians feel and have no obligation to subsidize industry. But these same physicians do not hesitate to reduce fees for an individual patient if the patient is not able to pay his fee in full. Inadequate fee schedules essentially reduce the availability of good medical care.

It is ironic that the worker's compensation patient is on the one hand, that portion of the physician's practice which he must treat for a reduced and rigid fee schedule, and yet on the other hand, represents in many cases, the most unpleasant and onerous portion of his practice.

The physician must be constantly aware of potential hostility between the patient and his employer, or between patient and other parties, which can very easily lead to hostility between the patient and the physician. The physician has to be acutely aware of the possibility of exaggeration of symptoms on the part of the patient for the purpose of secondary gain or because of hostility. If the doctor fails to recognize these factors, he is certainly less able to help the patient overcome his symptoms.

While it is very common in worker's compensation cases to observe subjective symptoms far outweighing objective findings, it is often difficult to tell whether that patient is actually malingering or honestly feels those symptoms because of anxiety, tension, hostility, pending litigation, etc. Very often the physician finds himself in the role of mediator, not only between patient and employer, but occasionally between patient and attorney, between patient and compensation carrier, and often between patient and prior physicians with whom the patient and attorney disagree. Occasionally, for all his trouble, the physician finds that the carrier has filed a petition to controvert, and if he's not aware, he will in good faith, continue to treat the patient, only to find that he will not be paid for these treatments.

Often, some individual in the office of the compensation carrier will arbitrarily reduce the physician's surgical or office fees, and this requires letters to be written, each and every letter taking secretarial time, as well as the physician's time and expense to dictate the letter. The result is that there is a tremendous amount of hassle in the treatment of worker's compensation cases, and quite frankly, there are many physicians in the State of Florida who are simply not willing to put up with it.

I believe the average physician treating industrial injuries, whether he is seeing the patient for fresh injury, or an evaluation following treatment by others, tries very hard to be purely objective and to give that worker-patient the benefit of the doubt.

We as physicians, instinctively want our patients to improve, and we want to share with our patients, everything that we know and think about them. We feel this helps the patient understand his or her problem, and better enables the patient to improve. Particularly in the primary treatment of an injured worker do I believe that the establishment of a healthy doctor/patient relationship should be sought, and I strongly suspect that the health of this relationship right from the beginning determines in many cases whether that worker is going to have a smooth recovery or not.

The injured worker is angry that he has been injured. He often feels that "somebody's going to pay for it," and he is not usually willing to accept anything less than complete and full recovery. Unfortunately, the treatment of biological conditions does not always permit complete recovery from each and every injury or illness. We are faced, therefore, with the frequent need to estimate permanent partial impairment, and this represents a source of contention between doctor and patient. Hardly ever does a patient feel the doctor has estimated his impairment high enough, and never does he receive remuneration from the system sufficient that

he would be willing to undergo the injury again. I am not suggesting that remuneration should be high enough to make a patient willing to go through such an injury again; I am only pointing out that this is the reasoning that I hear patients verbalize.

I think there is a widespread feeling in this country that money can solve any problem, and this includes the injured workman. The injured workmen are made aware daily of huge sums awarded through the judical system of this country to people who are injured. It is difficult to explain to the patient that neither the weekly compensation check, nor the final settlement, is intended to be a reward of any kind. The patient's idea of what is fair is far different from what is provided by the law.

Very often we see injured workmen resist treatment and have persistent symptoms for long past what we would estimate to be the normal time. Then, with the settlement of the case, the patient's symptoms miraculously improve with the "greenback poultice." This is not to say that all injured workmen are motivated solely by greed or secondary gain, but it is simply to say that secondary gain plays some part in the recovery of every patient injured in such a way as to involve third party responsibility.

Often times, the physician is requested by counsel or by insurance carrier to examine a patient simply for evaluation purposes. In these cases, most physicians make no attempt to establish a doctor/patient relationship. The doctor reports on these instances to the parties who request the evaluation, and very often tells the patient nothing. I believe this practice creates an atmosphere of suspicion on the part of the patient, and frequently, a few simple sentences of explanation, sharing the examining physician's impressions with the patient, assures the patient that he has indeed been in the presence of a warm and sympathetic, although objective, human being.

● Dr. Richards, 1315 South Orange Avenue, Orlando 32806.

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## Too, Too Perfect

**If all our bills were paid**
**And all our cares were done;**
**If every path were made**
**And every struggle won;**
**If every wish came true**
**And every heart were gay,**
**Whatever would we do**
**To pass the time away?**
**If every sky was fair**
**And everything we tried**
**Succeeded; if despair**
**Came never to our side;**
**Were every burden light,**
**Pray tell me, if you can,**
**If everything were right**
**What would proclaim the man?**
**If no one ever failed**
**And no one wronged a friend;**
**If no one were assailed**
**By hatred, and the end**
**Of everything were known,**
**Each mystery unfurled**
**Oh, what a monotone**
**Would be this splendid world!**

Author Unknown

# Disabled Physician Program Florida Needs One

**Robert G. Steele, M.D.**

Members of the Florida State Board of Medical Examiners see many disabled Physicians. We feel that we see only the tip of the iceberg and that many of these disabled physicians are not practicing responsible and adequate medicine.

The Disabled Physician shows symptoms of emotional problems and chemical substance abuse including alcohol. This is a disease, a very treatable disease but a disastrously fatal disease if left untreated. His close peers, his family, many of his patients, sense something is very wrong but are at a loss as how to deal with it.

There **is** a way of dealing with the situation that is effective. It requires the sanction and financial support of the entire Florida Medical Association. It can't work without it.

Our sister state, Georgia, had done pioneering work and now has a laudable, enviable Disabled Physician program. It is high time that Florida acts, as we have as many, probably more, disabled physicians than Georgia. We can easily gain the cooperation of the Medical Association of Georgia in setting up a Florida disabled physician program. We can profit from their expertise and their mistakes. We can use the viable Georgia disabled physician program for both consultation and modeling. The International Physicians in Alcoholics Anonymous want to help and have many members in Florida.

The "bare bones" of a disabled physician program are:

A) Educational groundwork.
B) Central office.
C) Hotline telephone service.
D) Confrontation teams who are advocates for disabled physicians.
E) Correlated treatment facilities for the disabled physicians, both in and out of Florida.
F) Spouses auxiliary program.
G) After care and support programs.

This table of organization may sound simple but it is not. It must grow slowly and gain respect in an orderly fashion. The disabled physician confrontor teams need careful training and selection and will need financial support from the Florida Medical Assocaition for travel expenses.

The initial dealing with the disabled physician is difficult. We all know that in any disease, doctors make terrible patients. We physicians are most resistant to treatment of the usual disabling diseases of emotional, chemical abuse and alcoholism. Thus the confronting physician needs special skills and use of other's experience to be effective in getting the disabled doctor to proper treatment in a timely fashion; improper confrontation would be disastrous. Georgia and other states have proved that this program, to be effective, must be carried out on a statewide level; local programs do not work with any real success.

Think about this disabled physician problem. Think of yourself, your peers. It is real, it is treatable and Florida is not dealing with it. We, the Board of Medical Examiners, do not want to take these physicians' licenses and destroy their careers. We want these treatable, disabled physicians put back on the track by a proper state program. The need is now, the skills are here, let's make a beginning.

● Dr. Steele, 1880 Arlington Street, Sarasota 33579.

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Dr. Steele is a former member of the Florida State Board of Medical Examiners; a Fellow of the American Psychiatric Association and is in the private practice of Psychiatry in Sarasota.

# Legislature Honors Medical Illustrator Frank H. Netter, M.D.

Before adjourning its 1979 session, the Florida Legislature adopted a concurrent resolution commending Frank H. Netter, M.D., for his contributions to medicine and medical art.

Dr. Netter, who resides in Palm Beach County, is generally regarded as one of the top medical illustrators in the United States.

In recent years he has contributed three "covers" for *The Journal of the Florida Medical Association*. The first, in January 1976, introduced the Special Issue on Dermatology. He also drew the cover for the Special Issue on Neurosurgery, which was published in the November 1976 issue.

Dr. Netter's most recent contribution to *JFMA* was last April when he drew the cover for the Special Issue on Nutrition.

Following is the text of the Florida Legislature's resolution:

WHEREAS, the State of Florida is fortunate to count Frank H. Netter, M.D. among the residents of the community of Point Manalapan, and

WHEREAS, Dr. Netter, prior to entering the field of medicine, studied art at the National Academy of Design and at the Art Students' League of New York, as well as at other schools and with private teachers, and

WHEREAS, Dr. Netter subsequently graduated from New York University College of Medicine and completed surgical residency training at Bellevue Hospital and was engaged for some time in the private practice of surgery, and

WHEREAS, Dr. Frank H. Netter's unique training both as a surgeon and an artist has made him unusually effective as a medical illustrator in conveying scientific facts and concepts to students at all levels of training in the field of medicine, and

WHEREAS, Dr. Frank H. Netter's contributions to medicine are internationally recognized as particularly reflected in the great demand which exists for the eight volumes of the CIBA Collection of Medical Illustrations, which he has compiled in close collaboration with many authorities in various fields of medicine since joining the CIBA Pharmaceutical Company in 1938, and

WHEREAS, not only physicians, students of medicine, and medical illustrators, but also scientists and health professionals in other fields, and laymen owe a great debt of gratitude to Dr. Frank H. Netter, and

WHEREAS, the State of Florida should acknowledge the accomplishments of the state's most renowned citizens, NOW, THEREFORE,

Be It Resolved by the House of Representatives of the State of Florida, the Senate Concurring:

That the Florida Legislature hereby commends Frank H. Netter, M.D. for his contributions and accomplishments in the fields of medicine and medical art and hereby accords this expression in recognition and appreciation of the invaluable service thus rendered to the citizens of the state.

BE IT FURTHER RESOLVED that a copy of this resolution be presented to Frank H. Netter, M.D., as a tangible token of the sentiments expressed herein.

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**Imagination is given to a man to compensate him for what he is not — and a sense of humor to compensate him for what he is.**

**— Paul Hathaway**

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# Florida Medical Association House of Delegates Proceedings

## One Hundred Fifth Annual Meeting — Florida Medical Association, Inc.
## Hollywood, May 23-27, 1979

**President's Address**
**O. William Davenport, M.D.**

Mr. Speaker, Board of Governors, Delegates of the Association and guests. I think this next few minutes will be entertaining to you because we are going to have some colorful slides. You know slides provide two real important functions; first they are a crutch for the speaker himself, and two, if the lights are turned down low almost everyone can go to sleep if they so desire.

1978-1979 has not been a year of major crisis for FMA such as Professional Liability Insurance in 1975 or Medicare in 1966. However, almost every week during the past year some type of confrontation, conflict or crisis has been met and hopefully resolved directly by your leadership. Today I want to share my version of home movies and describe some of these activities. Actually these are slides and a pictorial review of many of the personalities of our organization.

The first priority of this past year was to develop and promote a policy regarding National Health Insurance. A policy that would be pleasing to the physicians of Florida.

Dr. Louis C. Murray, with the help of Dr. W. Harold Parham, developed and presented a policy paper to the Fall Board of Governors meeting. This policy was adopted. The Board then instructed the AMA Delegates to present and promote this as a resolution at the December meeting of the AMA. Dr. James Cook Jr., was on the reference committee debating this question. As you know, Resolution #62 was adopted by an overwhelming majority of the House of Delegates. Not enough can possibly be said about the persuasive oratory of Dr. Joseph Von Thron. I would like at this time to salute our entire AMA delegation and particularly Joe.

Earlier this month we made our 30th annual Congressional Visitation to Washington. Some impact of our Resolution #62 is already being felt there. Undoubt-

Outgoing FMA President O. William Davenport, M.D., of Miami, addresses the House of Delegates.

edly Senator Long from Louisiana has already modified his catastrophic insurance bill and possibly will change it even more. We think this is at least partly due to Resolution #62. Many subjects of mutual interest were discussed with our individual Congressmen and I think all the points we tried to make were well taken. Even our more liberal Congressmen confided to us while we were there that there was no possibility of a Kennedy-Corman type of National Health Insurance this year. All Congressmen and Senators attended this luncheon and we were very gratified that we had 100% attendance.

In the meantime, on the homefront, legislative activity continues to be a series of frustrations, disappointments, and compromises but most of the time gratifying results have eventually evolved.

Currently your Legislative Council, lobbyists, key contact physicians, and all of your leadership are daily involved in state legislative activities. We feel that most, if not all, of the Tort Reforms will be retained intact. Dr. Jim Perry, Chairman, Council on Legislation and Regulations, and your committee have performed admirably during the entire year but particularly during the past two months, and we owe you a debt of gratitude.

Some of the recurring as well as the new issues before the legislature include restructuring of the State Board of Medical Examiners, changing the Nurse Practice Act, legislation concerning cost containment, and attachments to standard health claim forms. We have developed in the FMA some policy papers on many of these subjects.

Earlier this year, under the leadership of Dr. Ed Annis, we won a major battle in our attempts to establish a separate Department of Health, however, our efforts went down the drain. We lost the war when our electorate voted down all the constitutional revisions. We are deeply indebted to Ed and all his activities on the Constitution Revision Commission.

Soon after the inauguration, your Executive Committee met with our new Governor. We were warmly received and introduced by Scotty Fraser, Director, Legislative Affairs, on a first name basis. The Governor personally took notes on all of our thoughts and hopefully some degree of liaison was established.

It is the strong conviction of your President that we should not neglect our scientific activities in education; therefore, the theme of Nutrition was developed for this year and is now culminating with this meeting. Under the leadership of Dr. Yank Coble, Chairman, Ad Hoc Committee on Nutrition, and with the help of Dr. Gerry Schiebler, Editor, and the Journal, our goal has been achieved.

The Chairman of Public Relations, Dr. Vernon Astler, utilized this theme of Nutrition and has produced a two minute as well as a five minute film in which Dr. George Christakis and I participated. The two minute film has been on TV in most parts of the State.

Our Judicial Council had a very trying year. For the first time in our history a county medical society's charter has been revoked. The continued problems in the Keys is an enigma that the Council has at least partly resolved. I appreciate all of their activities this year and I know the trying times they have been through.

Our Council on Medical Economics has been extremely busy with Dr. Jim Richards appearing at legislative committee meetings on Workmen's Compensation which you know has evolved into a complete revision of the law. Jim, with the help of Dr. John Lee and Dr. Champ Taylor have continued to provide leadership on the state Committee on the cost of Medical Care, and I am sure that this voluntary effort has had an impact on the current Legislature.

Our Council on Medical Services is the real workhorse of the organization with six important committees on this Council. Dr. Joe Ostroski, Chairman, has continued the tradition of dedication and hard work. The many activities of these committees are summarized in your handbook.

The Council on Medical Systems, Chaired by Dr. Jim Borland, consists of the committees on HSA's, Medicaid, and PRO; however, Jim has spent a great deal of his time this year developing the Florida Health Data Corporation. This Corporation now has more than 26 hospitals and several other clients as subscribers and the outlook appears good.

The Committee on HSA's continues to be the busiest single committee of the Council. The dedication of the Chairman, Dr. Charles F. Tate, and all of this committee is greatly appreciated.

The Council on Specialty Medicine has dealt with many problems this year. The principal ones being cooperation of the specialty groups with the HSA's, the question of second opinions, and many more items listed in your handbook. Our specialty groups, of course, provide our scientific program for the most part each year. Thirty-three of these groups are participating now. We wish to thank this Council and all the specialty groups it represents.

There was no interim or called meeting of the House of Delegates during the past year, therefore, the FMA Leadership Conference was reinstated. The Conference drew a record attendance of 139 persons representing 34 county medical societies or 98% of the total membership. Many people believe it was one of the most successful conferences of its kind ever sponsored by the FMA.

Our Florida Medical Foundation has made some important decisions this year, including its discontinuation of medical student loans. Medical student loans were discontinued because so many were defaulted. Funding

however, continues on medical research, usually in the form of grants.

The Insurance Reciprocal and PIMCO are firmly established as one of the leaders of physician insurance plans. More than one half of our membership are subscribers. One of the major concerns of the Reciprocal Board is the relative apathy of our physicians to serve on mediation panels. The importance of this voluntary service can not be over emphasized so let's take this message home to our colleagues. Lloyds of London continues to provide our re-insurance. The Board of Governors worked extremely hard with dedication and concentration.

Last year at this time you authorized your President to appoint a new Ad Hoc Committee on Blue Shield. I have stayed as neutral as possible on this question and have made my appointments to reflect this attitude. Dr. Charles Kahn and his committee have submitted recommendations for your consideration at this meeting. I want to thank this committee for its extremely hard work.

However, it has not been all hard work this year. A wild hog barbeque was held at my home last January in conjunction with a Board of Governor's meeting.

We would like to thank Pat Thames and the Auxiliary for all their hard work this past year.

I am more optimistic now than just a few years ago concerning the future of our medical system. I think we are meeting the challenge. Medical education far surpasses anything in the world. Continuing medical education is ahead of the politicians and social planners. Scientific advances and diagnosis in treatment are almost beyond imagination. Cooperation of academe and the specialty groups with organized medicine has helped in cost containment as well as to stave off some oppressive state and federal regulations. A wave of conservatism and resentment of excessive taxation can work to our benefit. Let's not miss any opportunities to enhance these developments to our advantage. I am firmly convinced that our present system of medical care is not motivated by selfish reasoning but is altruistically dedicated to the welfare of our patients and the public as a whole. It is my sincere belief that the FMA is one of the finest, if not the finest, state associations in the nation. Perhaps it is our great diversity of geography, or diversity of ethnic backgrounds, climate or urban vs. rural. All these things may unite us rather than divide us.

I want to thank this House of Delegates, the Board of Governors, all the various special committees, and our fine staff for your support during the past year. God bless you.

**One of Florida's hot new musical groups give The Journal's photographer a minute before rushing off to the Nostalgia Party to unveil their new hit, "*The FMA Song.*" Joseph A. de Cenzo, M.D., (left) and FMA President O. William Davenport, M.D., both of Miami, sang the lyrics to the accompaniment of Mrs. Davenport's sweet piano.**

# First House of Delegates

The First House of Delegates convened at 4:30 p.m. on Wednesday, May 23, 1979, in Ballroom A of the Diplomat Hotel, Hollywood, Florida, with Sanford A. Mullen, M.D., Speaker of the House, presiding.

The House was led in singing the National Anthem by Mrs. Mary Ann Matthews, accompanied by Mrs. Jody Jarrell on the piano, as the Colors were presented by the U.S. Marine Corps Color Guard of Miami.

The invocation was given by Jere W. Annis, M.D., Past President.

Dr. Harold L. Williamson, Chairman of the Credentials Committee, reported that a quorum of 231 delegates were present representing 37 counties which constituted a quorum. Dr. Williamson moved that the delegates be seated. The motion carried.

### Delegates

ALACHUA — Thomas D. Bartley, M.D.; James C. Garlington, M.D.; William T. Hawkins, M.D.; Douglas O. Jenkins, M.D.; Gerold L. Schiebler, M.D.; William C. Thomas, M.D.; Steve Westgate, Student Delegate; (Absent — O. Frank Agee, M.D.).

BAY — Philip Cotton, M.D.; James D. Nixon, M.D.

BREVARD — Hani M. Agrama, M.D.; Richard N. Baney, M.D.; Brian P. Gibbons, M.D.; Juan A. Guerrero, M.D.; Howard W. Pettengill, M.D.; Robert J. Sarnowski, M.D.

BROWARD — Leroy G. Appell, M.D.; Anna M. Blenke, M.D.; Robert J. Brennan, M.D.; Andre S. Capi, M.D.; Russell B. Carson, M.D.; Phillip A. Caruso, M.D.; Willis N. Dickens, M.D.; Burns A. Dobbins, M.D.; Arthur L. Eberly, M.D.; Kenneth H. Farrell, M.D.; William M. Glantz, M.D.; Stanley S. Goodman, M.D.; William C. Hartley, M.D.; George P. Messenger, M.D.; Raymond E. Parks, M.D.; Thomas F. Regan, M.D.; Peter A. Tomasello, M.D.; Anthony J. Vento, M.D.; Juan S.A. Wester, M.D.; (Absent — Robert L. Andreae, M.D.; Charles H. Bechert, II, M.D.; Charles M. Bonura, M.D.; Bruce Burgess, M.D.; Ernest Constantino, M.D.; Paul A. Flaten, M.D.; Joseph E. Gelety, M.D.; F. Gary Gieseke, M.D.; James A. Jordan, M.D.; David C. Lane, M.D.; James M. Sachs, M.D.)

CAPITAL — Robert P. Johnson, M.D.: Nelson H. Kraeft, M.D.; George N. Lewis, M.D.; Jack W. MacDonald, M.D.; Robert N. Webster, M.D.

CHARLOTTE — T. Civitella, M.D.: (Absent — Allen Baver, M.D.; Melvyn J. Katzen, M.D.)

CITRUS-HERNANDO — W. Randall Jenkins, M.D.; (Absent — James J. Cuffe, M.D.)

CLAY — Laurin G. Smith, M.D.

COLLIER — Virgil A. Ponzoli Jr., M.D.; Donald Q. Vining, M.D.; Robert J. Wald, M.D.

COLUMBIA — (Absent — Henry E. Plenge, M.D.)

DADE — Edward Annis, M.D.; Jerome Benson, M.D.; Robert L. Beshany, M.D.: Rufus K. Broadaway, M.D.: Manuel L. Carbonell, M.D.; Edmund Cava, M.D.; Richard C. Clay, M.D.; Jack Q. Cleveland, M.D.; Vincent P. Corso, M.D.; O. William Davenport, M.D.; Herbert H. Davis, M.D.; Joseph H. Davis, M.D.; Charles A.

Speaker of the House Sanford A. Mullen, M.D., of Jacksonville, presides at the opening session of House of Delegates on Wednesday, May 23. Pictured (left to right) are: FMA Executive Vice President W. Harold Parham, D.H.A., Jacksonville; Treasurer J. Russell Forlaw, M.D., Boynton Beach; Secretary Robert E. Windom, M.D., Sarasota; President O. William Davenport, M.D., Miami; Dr. Mullen; Vice Speaker James B. Perry, M.D., Fort Lauderdale; Vice President William W. Thompson, M.D., Fort Walton Beach; Immediate Past President Louis C. Murray, M.D., Orlando; and Parliamentarian Charles J. Kahn, M.D., Pensacola.

Dunn, M.D.; Franklin J. Evans, M.D.; Diego S. Falcon, M.D.; Miguel Figueroa, M.D.; George R. Gage, M.D.; Maurice M. Greenfield, M.D.; Julian H. Groff, M.D.; James K. Johnson, M.D.; Walter C. Jones, III, M.D.; James R. Jude, M.D.; Herbert S. Kaiser, M.D.; Norman M. Kenyon, M.D.; Banning G. Lary, M.D.; Simon E. Markovich, M.D.; Ildefonso R. Mas, M.D.; Roberto L. Maury, M.D.; Miguel A. Mora, M.D.; Joseph T. Ostroski, M.D.; Norman H. Pevsner, M.D.; Oscar Sandoval, M.D.; Ronald Scherr, M.D.; Janice K. Sherwood, M.D.; Everett Shockett, M.D.; S. William Simon, M.D.; David Sims, M.D.; Margaret C.S. Skinner, M.D.; Douglas Slavin, M.D.; Samuel P. Stokley, M.D.; Mario Stone, M.D.; William Straight, M.D.; Charles F. Tate, M.D.; John C. Turner, M.D.; Thomas B. Turner, M.D.; Juan Valdes-Castillo, M.D.; Raymond C. Walker, M.D.; Edgar W. Webb, M.D.; Harold H. Weiner, M.D.; Steven M. Weissberg, M.D.; Edmund K. Zahn, M.D.; Sheldon Zane, M.D.; (Absent — Manuel Abella-Fernandez, M.D.; Seymour Alterman, M.D.; Sol Center, M.D.; Leo Grossman, M.D.; Abraham Gurinsky, M.D.; Marshall Hall, M.D.; Joseph Harris, M.D.; Robert B. Katims, M.D.; Warren Lindau, M.D.; Carlos G. Llanes, M.D.; Pedro A. Ramos, M.D.; Walter M. Sackett, M.D.; Harold M. Unger, M.D.; Elliot Witkind, M.D.; Thomas J. Zaydon, M.D.; Shreve M. Archer, Student Delegate)

DESOTO-HARDEE-GLADES — Calvin W. Martin, M.D.

DUVAL — Harvey E. Bernhardt, M.D.; Yank D. Coble, M.D.; Patricia C. Cowdery, M.D.; Wilbert L. Dawkins, M.D.; Richard C. Dever, M.D.; Charles P. Hayes Jr., M.D.; Walter G. Jarrell, M.D.; Benjamin A. Johnson, M.D.; Charles B. McIntosh, M.D.; Daniel B. Nunn, M.D.; John A. Rush, M.D.; Guy T. Selander, M.D.; Robert H. Threlkel, M.D.; William D. Walklett, M.D.; James W. Walker, M.D.; (Absent — James L. Borland, M.D.; Emmet F. Ferguson Jr., M.D.; John F. Lovejoy, M.D.; Faris S. Monsour, M.D.)

ESCAMBIA — Paul T. Baroco, M.D.; Eric F. Geiger, M.D.; Kenneth I. Holman, M.D.; Charles J. Kahn, M.D.; Charles F. McConnell, M.D.; Robert K. Wilson, M.D.; Henry M. Yonge, M.D.

FRANKLIN-GULF — Joseph P. Hendrix, M.D.

HIGHLANDS — Donald C. Hartwell, M.D.; Glenn V. Hough, M.D.

HILLSBOROUGH — Richard A. Bagby, M.D.; Louis E. Cimino, M.D.; Francis C. Coleman, M.D.; Irving M. Essrig, M.D.; John C. Fletcher, M.D.; Victor H. Knight Jr., M.D.; Thomas E. McKell, M.D.; Edward Pedrero, M.D.; John K. Petrakis, M.D.; William W. Trice, M.D.; Harold L. Williamson, M.D.; Woody N. York, M.D.; (Absent — Richard G. Connar, M.D.; Richard S. Hodes, M.D.; Joel W. Mattison, M.D.; Ralph E. Rydell, M.D.; Ralph M. Stephan, M.D.; John A. Baker, Student Delegate)

INDIAN RIVER — Donald L. Ames, M.D.; (Absent — Ferdinand F. Becker, M.D.)

LAKE — Frederick C. Andrews, M.D.; James M. Hardy, M.D.; Robert H. Hux, M.D.

LEE — Cecil C. Beehler, M.D.; Larry P. Garrett, M.D.; John S. Hagen, M.D.; H. Quillian Jones, M.D.; Marcus M. Moore, M.D.; Michael J. Murray, M.D.

MADISON — (Absent — Adolfo G. Dulay, M.D.)

MANATEE — Robert E. Blackwood, M.D.; Thomas R. Busard, M.D.; Sanford Elton, M.D.; Keith J. Lassen, M.D.

MARION — C. Brooks Henderson, M.D.; Samuel L. Renfroe, M.D.

MARTIN — Fred S. Carter, M.D.; William A. Hewson, M.D.

MONROE — (Absent — Ronald H. Chase, M.D.; Herman K. Moore, M.D.)

NASSAU — (Absent — Jose L. Castillo, M.D.)

OKALOOSA — Eugene R. Valentine, M.D.; (Absent — David R. Arrowsmith, M.D.)

ORANGE — Clarence C. Bailey, M.D.; Clifford D. Bidwell, M.D.; Clarence H. Brown, III, M.D.; Francis M. Coy, M.D.; Clarence M. Gilbert, M.D.; Alberto J. Herran, M.D.; Wm. Edward Hoffmeister, M.D.; David L. Mackey, M.D.; Joseph G. Matthews, M.D.; Franklin B. McKechnie, M.D.; Hector Mendez, M.D.; James F. Richards Jr., M.D.; Edward W. Stoner, M.D.; T. Byron Thames, M.D.; Robert B. Trumbo, M.D.; (Absent — James F. Schoeck, M.D.)

OSCEOLA — George A. Gant, M.D.

PALM BEACH — Vernon B. Astler, M.D.; Richard C. Cavanagh, M.D.; John D. Corbitt Jr., M.D.; Lee A. Fischer, M.D.; J. Russell Forlaw, M.D.; Luis R. Guerrero, M.D.; James T. Howell, M.D.; V.A. Marks, M.D.; Charles E. Metzger, M.D.; Benjamin Moore, M.D.; Roger D. Petersen, M.D.; Reginald J. Stambaugh, M.D.; Arthur L. Trask, M.D.; Dick L. Van Eldik, M.D.; (Absent — Ben R. Thebaut Jr., M.D.)

PANHANDLE — Herbert E. Brooks, M.D.; James T. Cook Jr., M.D.

PASCO — Nessan McCann, M.D.; (Absent — Morris L. Saperstein, M.D.)

PINELLAS — William W. Atkinson, M.D.; Thomas M. Daniel, M.D.; Michael H. Diamond, M.D.; Charles K. Donegan, M.D.; Irwin L. Entel, M.D.; Kay Knight Hanley, M.D.; David S. Hubbell, M.D.; Morris J. LeVine, M.D.; Donald I. MacDonald, M.D.; Jack A. MaCris, M.D.; J.H. Miller, M.D.; Donald G. Nikolaus, M.D.; Rex Orr, M.D.; David T. Overbey, M.D.; Frederick O. Smith, M.D.; (Absent — Robert L. Dawson, M.D.; William F. Mallette, M.D.; Frank I. Mendelblatt, M.D.)

POLK — Salvadore J. Barranco, M.D.; Allan Erde, M.D.; Frank J. Fischer, M.D.; Clyde E. Gibson, M.D.; John W. Glotfelty, M.D.; Stanley W. Lipinski, M.D.; Paul A. Tanner Jr., M.D.; (Absent — Thomas M. Caswall, M.D.)

PUTNAM — Roy E. Campbell, M.D.

ST. LUCIE-OKEECHOBEE — William H. Meyer Jr., M.D.; Bruce E. Mills, M.D.

SANTA ROSA — (Absent — William N. Watson, M.D.)

SARASOTA — John N. Carlson, M.D.; Lee S. Harris, M.D.; Samuel E. Kaplan, M.D.; Kenneth C. Kiehl, M.D.; Martin F. Mihm, M.D.; Franklin Pfeiffenberger, M.D.; Karl R. Rolls, M.D.; (Absent — Richard C. Rehmeyer, M.D.)

SEMINOLE — Luis M. Perez, M.D.; Frederick J. Weigand, M.D.

SUWANEE-HAMILTON-LAFAYETTE — (Absent — Hugo F. Sotolongo, M.D.)

TAYLOR — John A. Dyal, M.D.

VOLUSIA — William R. Jones, M.D.; Frank J. Lill, M.D.; Alvin E. Smith, M.D.; Richard W. Snodgrass, M.D.; Charles A. Stump, M.D.; James G. White, M.D.

WALTON — (Absent — Howard F. Currie, M.D.)

WASHINGTON — John T. Grace, M.D.

SPEAKER OF THE HOUSE — Sanford A. Mullen, M.D.

VICE SPEAKER — James B. Perry, M.D.

## Amendments to Rules and Order of Business

The Speaker stated that the Order of Business is as listed in the Handbook; however, he proposed the following changes to the House:

First, he clarified the meaning of the item "Additional Reports from the Floor". House of Delegates policy requires that any business to be considered by this House must have been submitted by 12:00 noon today. Reports of an emergency nature may be added by the Presiding Officer, the Board of Governors or the President. Presentation of any other report or resolution

not already on the agenda will now require the unanimous consent of the House, and must be in writing.

Second, The Speaker and Vice Speaker had been asked to reverse the order in which the Reference Committees will present their reports, beginning with Reference Committee No. V, proceeding then in reverse order and ending with No. I.

This is being done in order to accommodate a request from the Chairman of the Board of Directors of Blue Shield, who asked that the decision of this House relative to future arrangements between the FMA and Blue Shield be decided as early in the meeting as possible, so they can determine if additional meetings of the membership of Blue Shield will be needed.

The final item is, with the increasing volume and complexity of the business before the House, your Speaker and Vice Speaker have deemed it advisable to designate a Parliamentarian. With the approval of the House, Dr. Charles Kahn was asked to serve as Parliamentarian for the 1979 House of Delegates.

There were no objections, and a motion to adopt the Rules and Order of Business which appear in the Handbook on pages 3 and 18-20, as amended, carried.

## Information for Delegates

The Rules and Order of Business for the House of Delegates is included in this Handbook.

Delegates and alternates whose names appear in this Handbook have been certified by their county medical societies. Our By-Laws do not permit an alternate to serve for a delegate who has once been seated. The By-Laws require that delegates fill out attendance cards at each meeting of the House of Delegates in order to be credited in attendance, and further, the chairman of the Credentials Committee is required to report to the House the number of delegates who have registered their attendance cards, thus eliminating the necessity of a roll call to seat delegates.

Reports and resolutions that were received before going to press are included in this Handbook. Delegates are urged to study them carefully before they are introduced in the House. Wherever possible, it is requested that resolutions and supplemental reports be forwarded to the Association's executive office by May 17 for duplication and distribution to the delegates.

Your attention is called to the format of the annual meeting, where the Reference Committee meetings will be held in the morning following the First Meeting of the House. All reports and resolutions will be referred to Reference Committees by the Speaker at the First Meeting of the House of Delegates. All members who are interested in any committee report or resolution should attend the Reference Committee meetings where a full discussion will take place. Council and committee chairmen are respectfully requested to be present and discuss their respective reports. All members of Reference Committees are urged to study carefully the reports and resolutions referred to them. The chief purpose of the Reference Committees is to allow an opportunity for as many members of the Florida Medical Association as possible to appear and be heard and thus have a voice in the business of the Association. In addition, discussions before the Reference Committees have the added advantage of avoiding long discussions at the meetings of the House of Delegates. Members may request the Reference Committee chairman to defer items in which they are interested in order that they may be present to discuss the subject.

All resolutions **must have a sponsor present** before the Reference Committee. Resolutions must be filed by 12:00 noon on the day of the First Meeting of the House of Delegates, typewritten and in proper form. The resolutions so presented will be available for distribution by the time the First House convenes. Only the "Resolved" portion of the resolutions will be adopted as policy.

All Reference Committee reports will be duplicated and available to the delegates at the Registration Desk on Saturday morning. We trust these provisions will result in an efficient and informed House of Delegates.

All reports and resolutions included in this Handbook, those which will be in the Delegates' Packets, and the reports of the Reference Committees have been printed on color paper for easy reference. This color code is as follows:

Reference Committee No. I — Green
Reference Committee No. II — Buff
Reference Committee No. III — Blue
Reference Committee No. IV — Pink
Reference Committee No. V — Goldenrod

According to our By-Laws, nominations and seconding speeches shall be limited to a maximum of two minutes each. If additional information needs to be presented, it should be duplicated and distributed to members of the House.

Your Speaker and Vice Speaker are available at any time to help in any way in the preparation of resolutions or in any capacity in which they might help any member of the Florida Medical Association.

Sanford A. Mullen, M.D., Speaker
House of Delegates
James B. Perry, M.D., Vice Speaker
House of Delegates

The Speaker introduced the officers of the Association: James B. Perry, M.D., Vice Speaker; O. William Davenport, M.D., President; Louis C. Murray, Immediate Past President; William W. Thompson, M.D., Vice President; Robert E. Windom, M.D., Secretary; J. Russell Forlaw, M.D., Treasurer; W. Harold Parham, D.H.A., Executive Vice President and Charles J. Kahn, M.D., Parlimentarian.

A motion carried to adopt the minutes of the 1978 House of Delegates as published in the July 1978 issue of *The Journal of the Florida Medical Association.*

Dr. Mullen, Speaker, advised that during the past year a number of FMA members had departed this life. In memory of these physicians, roses had been placed in the vases at each end of the Speaker's podium. Dr. Mullen asked that the House observe a moment of silent prayer in respect and memory of these members.

The Speaker then instructed the House.

## Remarks — Speaker of the House

It is my distinct honor to have the opportunity to address this House for the first time since I have been elected Speaker. My first comment is that I would like to thank each of you for electing me to this important position. I can assure you that I will make every effort to fulfill the responsibility which you have given me by your vote a year ago.

As we begin the important business of this House of Delegates, it

seems in order for me to give you a brief summary of the responsibilities and duties all of us have in working to make this House of Delegates function at its highest possible level. Although the activities of the House of Delegates are well known to some of you, many of you are newly elected and are less than fully aware of the role of the House of Delegates in the Florida Medical Association.

The bylaws of the FMA provide that each county medical society has the privilege of sending one delegate for every 40 active members and an additional delegate for each fraction above the last complete unit of 40. The bylaws further provide that each county medical society is entitled to at least one delegate regardless of size. There is also one medical student delegate from each county medical society in whose jurisdiction a medical school is located. These members plus the Speaker and Vice Speaker constitute the voting members of the House of Delegates — a total of approximately 290 individuals.

The privilege of the floor is also granted to all officers, presidents of county medical societies, members of the Board of Governors, our delegates to the American Medical Association, past presidents of the FMA, members of the Council on Specialty Medicine, Council chairmen, and AMA general officers and past presidents who are FMA members. This privilege of the floor includes the right of these members to make motions provided that they are seconded by voting members of the House. There are approximately 100 members who have the privilege of the floor in addition to the voting members. The presiding officer may grant the privilege of the floor to others whenever he deems it necessary.

As you probably know, all of the deliberations of the FMA, including the activities and actions of the membership, the House of Delegates, the Board of Governors, all councils and committees are governed by parliamentary usage as contained in Sturgis Standard Code of Parliamentary Procedure. The usage as stated by Sturgis prevails unless otherwise provided by the FMA charter or bylaws or unless waived or modified by two-thirds vote of the members present at any session of the general membership or at a meeting of the House of Delegates. I would urge that each of you obtain a copy of Sturgis for your own use because it is of great improtance for all of us to be thoroughly familiar with parliamentary procedure.

I would like to quote from Sturgis concerning the duties of Delegates.

> "The first duty of a Delegate is to vote for what he believes is best for the organization as a whole; his second duty is to vote for what is best for the particular group that he represents. He is first a legislator for the whole organization and second a spokesman for his particular group. The Delegate should understand thoroughly how the members of his group feel about the proposals to be voted on but should be trusted to follow his own best judgment in evaluating and voting on measures as they are finally presented for decision."

Thus each of you in the House of Delegates is an official of the Florida Medical Association. Collectively you are here to act as the voice of the 12,500 members of the organization. This is an extremely important assignment which can be quite rewarding to those who participate fully in the activities of the House. This participation will require a significant amount of your time over the next few days but the personal satisfaction of carrying out the responsibility of representing the doctors of medicine of Florida makes it well worthwhile. It is probable that several of the actions taken by this House in the next few days will have a major impact on the practice of medicine in our state and nation and play a significant role in improving medical standards and patient care throughout our country. It is no exaggeration to say that history will be made in the next few days by you ladies and gentlemen of the House of Delegates. The House of Delegates functions by a system of reference committees. There are five reference committees of the House this year. Each of these committees is made up of five voting members of this House. One or two AMA delegates and alternate delegates are advisory members of each of these reference committees. To each of these committees will be assigned various reports and resolutions. Each action of any significance taken by the FMA officers and Board of Governors during the past year will be presented for review by one of these reference committees. In your Handbook, together with the items in your packet, there is complete information concerning the matters which will be considered by the various reference committees. You are urged to become thoroughly familiar with all of these items so that you can attend the reference committee hearings in order to discuss issues which are of particular interest to you.

It is quite likely that there will be items of interest to you in more than one reference committee. Our reference committee chairmen will do everything possible to accommodate those of you who wish to be heard on one or more of the issues referred to their committees. If you have a potential conflict, with items of particular interest to you scheduled for discussion at the same time in different committees, please feel free to contact the reference committee chairmen and attempt to work out an accommodation. Although every effort will be made to make it possible for you to be present when items of interest to you are being considered by each committee, it may not always be possible to accommodate you because of the large workload which each reference committee will have. It should also be pointed out that this year each reference committee has a senior staff person, as well as a recording secretary, assigned to it for the purpose of providing technical information to the committee. Each committee member has been given a copy of the final report of his particular reference committee as approved by the House of Delegates for the past three years. In addition to this material the staff will have available for the reference committee an analysis of all FMA policies for the past ten years. We hope that these new features will help the reference committees in their deliberations.

The House of Delegates of the FMA is an example of democracy in action. Each of you has an opportunity to be heard on any topic on which you desire to make comments. You have an opportunity to help shape the policy of the FMA by your participation. The reference committees will listen to you and all members of the FMA who desire to discuss the issues for which they are responsible. After the hearings have concluded the reference committees will go into executive session to prepare their reports.

The reports of the reference committees will be presented in final written form to the staff for duplication by Friday at noon. There will be a limited number of copies of these reports available to each county medical society delegation by mid afternoon on Friday. By Saturday morning at 8:00 a.m. all of the reports will be in final duplicated form with a set available for each delegate. The reports of the reference committees will be presented at the second and third House of Delegates meetings which are scheduled for this Saturday and Sunday. It is hoped that most of the detailed discussion will take place at the reference committee hearing. We recognize that every delegate has the opportunity and privilege of discussing any item at the time the reference committee makes its recommendations to this House. At no time would we want to do anything to stifle discussion but we respectfully request that all delegates recognize the necessity of concise and pertinent discussion on controversial items in the reports of reference committees. The basic philosophy must always be that the majority will determine the policies of the Florida Medical Association but that the minority will always have an opportunity to be heard.

After acting on the reports of the reference committees, the House will have the responsibility of electing association officers for the

coming year. This responsibility of the House is one of its most important and will take place at the third session on Sunday.

As delegates you have the ultimate responsibility for deciding the course of the Florida Medical Association for the next year and even beyond that. Your actions on the reference committee reports determine FMA policy. This is a great responsibility but it is a wonderful challenge for you to use all of the background you have, first as citizens of this great country, and second as doctors of medicine, in determining the future of your association — the Florida Medical Association.

All of this serious and important business will be tempered by the fellowship and social activity of being in convention with your fellow physicians from all over the state. I look forward to a most productive meeting. I am greatly excited at the prospects of working with all of you through these next few days as we study and come to decisions on the challenging issues which face us this year. Good luck to each of you.

The remarks of the Speaker of the House of Delegates were referred to Reference Committee No. III for consideration.

Dr. O. William Davenport, President, assumed the chair to present the A. H. Robins Company Award for "Outstanding Community Service by a Physician." Dr. Davenport requested Dr. Luis Guerrero, President of the Palm Beach Medical Society, to escort Clarence Landen Brumback, M.D., M.P.H., to the podium to receive the award. A. H. Robins Company representative, Mr. B. T. Whitefield Jr., was present for the presentation.

## A. H. Robins Company Award For Outstanding Community Service By A Physician

C. L. Brumback, M.D., M.P.H., Director of the Palm Beach County Health Department for 29 years, has been elected to receive the 1979 A. H. Robins Company Award for Outstanding Community Service by a Florida Physician.

Dr. Brumback was selected from among several nominees by the Board of Governors of the Florida Medical Association to receive the prestigious award which recognizes civic consciousness.

In 1950, Dr. Brumback took over the understaffed and underbudgeted county health department and over the years molded it into a model public health agency. The Department's constituency ranges from migrant farmers to Palm Beach millionaires.

A native of Denver, Colorado, he attended the University of Kansas and received his M.D. degree there in 1943. He went on to earn a Master of Public Health degree from the University of Michigan.

During World World II he served in the U.S. Army Medical Corps in the European Theater. He retired with the rank of Colonel in the U.S. Army Reserve.

Prior to assuming direction of the Palm Beach County Health Department, Dr. Brumback served briefly as a county health officer in Missouri, then as Director of Public Health, U.S. Atomic Energy Commission, Oak Ridge, Tennessee.

Dr. Brumback is a Diplomate of the American Board of Preventive Medicine and a Fellow of the American Public Health Association (APHA), the American College of Preventive Medicine and the Royal Society of Health. He is a Past President of the Florida Association of County Health Officers, the Florida Academy of Preventive Medicine, and the Florida Public Health Association.

C. L. Brumback, M.D. of West Palm Beach (right), longtime Director of the Palm Beach County Health Department, receives the A. H. Robins Company Award for Outstanding Community Service by a Physician from FMA President O. William Davenport, M.D.

He has served APHA in many important capacities including membership on the Governing Council and the Executive Board. In the 1960's, he was Chairman of APHA's Task Force on Health Centers.

He has served as an officer and board member of the YMCA of the Palm Beaches; American Lung Association of Southeast Florida; Palm Beach County Mental Health Association; Palm Beach County Chapter, American Red Cross; the local unit of the American Cancer Society; the Palm Beach County Chapter of the National Foundation; the Community Services Council; the Heart Association of Palm Beach County; the Community Mental Health Center of Palm Beach County, and others.

His professional and civic work has been recognized by many honors, among them: the Meritorious Service Award of the Florida Public Health Association (1968); the State of Florida Merit Award; Honorary Member of the Florida Nurses Association; Physician-of-the-year Award of the American Association of Public Health Physicians (1975); Book of Golden Deeds Award of the Exchange Club of West Palm Beach (1975); Outstanding Service Award of the Palm Beach County Medical Society (1975); and the Meritorious Award of the Southern Branch, APHA (1978).

Dr. Brumback expressed his appreciation to the Palm Beach Medical Society and the Association for this award. Dr. Davenport then read a telegram from Clayborn Robins Jr., President of the A. H. Robins Company, congratulating him on receiving the award.

Dr. Davenport asked Dr. Joseph Matthews and Mr. William Flaherty, President of Blue Shield of Florida, to escort Mr. J. W. Herbert to the platform to receive a

Certificate and Resolution of Grateful Recognition for the many years of distinguished service rendered to the medical profession and citizenry of the State of Florida.

### Resolution of Grateful Recognition

Whereas, J. W. (Jack) Herbert, of Jacksonville, Florida, has rendered outstanding and meaningful service to the medical profession and citizenry of the State of Florida since 1948; and

Whereas, This dedicated leader was born in Scranton, Pennsylvania, in June 1915; graduated from Scranton University in 1937; and

Whereas, This illustrious individual started his association in health care with the State of Pennsylvania as a Medical Social Service Representative, then enlisting in the United States Navy — after four years of which he was honorably discharged as a Lt. Commander — then returning to the health care field with Blue Cross of Chicago in 1945; becoming the Assistant Executive Director of Blue Cross and Blue Shield of Florida in 1948 and President of Blue Cross and Blue Shield in 1970; and has further served the community by having been on the Board of Directors of Blue Cross of Florida, Inc.; by being on the Board of Directors of Blue Shield of Florida, Inc., the Jacksonville Health Systems Agency, a member of the Florida Council of 100, the Knights of Columbus and the Civitan Club of Jacksonville; and in 1973 having been appointed by President Nixon as Metro Chairman of the National Alliance of Businessmen for the Jacksonville area, and likewise having served the nation as a member of the Board of Directors of the Blue Cross Association, as Chairman of the Board of Directors of Health Service, Inc., and as Chairman of the Inter-Plan Bank Committee, and

Whereas, This dynamic executive has overseen the growth of membership of Blue Cross and Blue Shield of Florida from 1,225,000 subscribers in 1970 to over 1,600,000 in 1978; therefore be it

RESOLVED, That a Certificate of Grateful Recognition be awarded to J. W. Herbert as a token of the warm appreciation that the officers, members and executive staff of the Association hold for the many years of distinguished service rendered by this outstanding gentleman.

Mr. Herbert expressed his appreciation to the Association and the physicians of Florida for this recognition.

Certificates of Appreciation were presented by Dr. Gerold Schiebler, Editor of *The Journal,* to the two graduating Student Editors of *The Journal of the Florida Medical Association,* Richard J. Snyder of the University of Miami and Jerrold A. Van Dyke of the University of Florida.

Dr. Davenport presented Dr. Eugene G. Peek Jr., a watch and a photo album in recognition and appreciation for 20 years of service as a member of the Association's Board of Governors. Dr. Peek introduced and expressed his appreciation to his wife Buggie for her support and to the Association for this recognition.

Dr. James Perry, Vice Speaker, introduced Mrs. T. Byron Thames, President of the Florida Medical Association Auxiliary. Mrs. Thames summarized some of the activities of the Auxiliary during the past year. Dr. Perry then introduced Mrs. B. David Epstein, President-

Mr. J. W. Herbert of Jacksonville (right) receives a Certificate of Grateful Recognition from FMA President O. William Davenport, M.D. Mr. Herbert retired several months ago as President of Florida Blue Cross and Blue Shield.

Eugene G. Peek, Jr., M.D., of Ocala (right), was presented with a watch and photograph album in recognition of his 20 years of service on the Board of Governors. At left is FMA President O. William Davenport, M.D.

Mrs. Thomas B. Thames of Orlando, President of the Florida Medical Auxiliary, addresses the Florida Medical Association House of Delegates.

Elect of the Florida Medical Association Auxiliary and Mrs. Muriel Bergnes, President of the American Medical Association Auxiliary. Mrs. Bergnes expressed her appreciation for the opportunity to speak to the House of Delegates and noted how fortunate the FMA is to have an Auxiliary whose members are giving such excellent support to organized medicine. Dr. Perry introduced Edward R. Annis, M.D., Past President of the AMA; James W. Walker, M.D., Past Officer of the FMA and President of PIMCO; Mr. William Flaherty, President of Blue Shield of Florida, Jacksonville; Mrs. Linus W. Hewit, Vice President of the AMA Auxiliary and Mrs. Marion Gilliland, National Historian of the AMA Auxiliary.

Dr. Mullen introduced the President, Dr. O. William Davenport. Dr. Davenport addressed the House. (See page 708 for the complete text of the President's address).

The President's Address was referred to Reference Committee No. III.

The Speaker resumed the chair and announced the members of the Reference Committees, the assignment of AMA Delegates to the Reference Committees and the times that each Reference Committee would meet.

**Reference Committee No. 1 — Health and Education**
Richard C. Clay, M.D., Chairman
Thomas D. Bartley, M.D.
Louis C. Cimino, M.D.
Arthur L. Eberly, M.D.
H. Quillian Jones, M.D.
Richard G. Connar, M.D. and William J. Dean, M.D. — AMA Delegate Advisors

**Reference Committee No. II — Public Policy**
Paul A. Tanner Jr., M.D., Chairman
Roy E. Campbell, M.D.
William C. Hartley, M.D.
Jerome Benson, M.D.
Herbert E. Brooks, M.D.
Rufus K. Broadaway, M.D. and Eugene G. Peek, M.D. — AMA Delegate Advisors

**Reference Committee No. III — Finance and Administration**
Richard B. Moore, M.D., Chairman
Guy T. Selander, M.D.
Calvin W. Martin, M.D.
Victor Knight, M.D.
Julian H. Groff, M.D.
Samuel M. Day, M.D. and Vincent P. Corso, M.D. — AMA Delegate Advisors

**Reference Committee No. IV — Legislation and Miscellaneous**
Frank C. Coleman, M.D., Chairman
Walter G. Jarrell, M.D.
Clarence M. Gilbert, M.D.
James R. Jude, M.D.
Brian P. Gibbons, M.D.
Joseph C. Von Thron, M.D. and Vernon B. Astler, M.D. — AMA Delegate Advisors

**Reference Committee V — Medical Economics**
David S. Hubbell, M.D., Chairman
C. Fenner McConnell, M.D.
Karl R. Rolls, M.D.
Franklin B. McKechnie, M.D.
Manuel L. Carbonell, M.D.
Charles K. Donegan, M.D. — AMA Delegate Advisor

Dr. Mullen announced that the assignment of reports and resolutions to Reference Committees were as indicated in the Handbook.

Dr. Mullen, Speaker, recognized a long time distinguished member of the Association, past AMA delegate and past Vice President of the AMA, Dr. Francis T. Holland of Tallahassee.

The Vice Speaker announced the assignment of Supplemental Reports and Resolutions which were received too late for inclusion in the Handbook, and which had been inserted into the Delegate's packets, were as indicated on the reports.

The Speaker announced that there would be a Health Run on Saturday morning at 7:30 a.m.

The Speaker brought to the attention of the House the dates and times of the Blue Shield Annual Meeting, the General Session, the FLAMPAC-Auxiliary Luncheon, and the President's Special "Nostalgia Party."

The House recessed at 6:00 p.m., to reconvene on Saturday, May 26, at 3:00 p.m.

# General Session

The General Session of the 105th Annual Meeting of the Florida Medical Association was called to order at 11:00 a.m., on Friday, May 25, 1979, in Ballroom A of the Diplomat Hotel, Hollywood, Florida, by the President, O. William Davenport, M.D.

Dr. Davenport introduced persons seated at the head table, then asked Dr. Eugene G. Peek Jr., President of the Florida Medical Foundation, and Mrs. T. Byron Thames, Immediate Past President of the FMA Auxiliary, to come to the podium to make presentations of grants from the AMA-ERF to Medical School Deans. Dr. Peek made the following presentations: $11,607.28 to Dr. William B. Deal, Dean, University of Florida College of Medicine, Gainesville; $10,127.80 to James Baldwin, representing the University of Miami School of Medicine, Miami; $646.00 to Dr. Deal representing Florida State University; and $8,032.50 to Dr. Hollis G. Boren, Dean, University of South Florida College of Medicine, Tampa.

On behalf of the Auxiliary of the Florida Medical Association, Mrs. Thames presented Dr. Peek with a check in the amount of $11,250.00 to be used by the Florida Medical Foundation for use for disabled physicians. Mrs. Thames also presented Dr. Peek with a check for $10,000.00 to be divided equally between the Florida Medical Schools. Mrs. Thames then asked Dr. Clyde Collins to come to the podium to accept a check in the amount of $3,200.00 to be used for additional copies of the Nutrition Issue of the Journal to be given to the medical schools for students and residents.

Dr. Davenport announced the winners of the 1979 Scientific Exhibit Awards.

## 1979 Scientific Exhibit Awards

**Honorable Mention**

"Management of Esophageal Strictures in Children"
Bradley M. Rodgers, M.D., Farhat Moazam, M.D., Thomas Rumley, M.D., and James L. Talbert, M.D., Departments of Pediatrics and Surgery, University of Florida College of Medicine, Gainesville.

"Pain Relief by Thalamic Stimulation"
Raul V. Rivet, M.D., Miami

"Percutaneous Transthoracic Lung Biopsy Using the 'Rotex' Needle"
Jerome Benson, M.D., Isanc Cohn, M.D., Godrat Golkar, M.D., Roberto Llamas, M.D., and Robert Hart, M.D., Miami Beach

"Ultrasound Evaluation of Bowel Pathology"
Edward I. Bluth, M.D., Christopher Merritt, M.D., Michael A. Sullivan, M.D., and Michael M. Katz, M.D., Oshsner Foundation Hospital, New Orleans, La.

**Special Merit**

"Bypass Grafts for Myocardial Ischemia"
James R. Jude, M.D., and Robert E. Cline, M.D., Northridge Heart Foundation, Fort Lauderdale.

**First Place**

"When a Patient Asks About Vitrectomy"
Mas G. Massoumi, M.D., West Palm Beach

**Second Place**

"Treatment of Fingertip Injuries with Presentation of a New Technique (Tubular Advancement Flap)"
W. Sanderson Grizzard, M.D., Stephen Gordon, M.D., and Elise Torczynski, M.D., Department of Ophthalmology, University of South Florida College of Medicine, Tampa.

**Third Place**

"Management of Combined Coronary and Peripheral Vascular Disease"
Paul F. Eckstein, M.D., R. Vijayanagar, M.D., Diego A. Bognolo, M.D., and P. Natarajan, M.D., Tampa.

The President then called Dr. Clyde Collins, Associate Editor of The Journal, to the platform to assist in presenting the awards for the Second Annual JFMA Awards Contest for County Medical Society Bulletins.

## Winners of Second Annual JFMA Awards Contest for County Medical Society Bulletins

**General Excellence**

The winner of this category is *"The Bulletin of the Hillsborough County Medical Association,"* Edward Pedrero, M.D., Editor.

**Most Improved Bulletin**

There were two first place winners in this category: *"The Picomeso Mail Bag"* of the Pinellas County Medical Society, Richard A. Essman, M.D., Editor; and *"Miami Medicine,"* Edward W. St. Mary, M.D., Editor.

**Best Editorials**

The winner of this category is *"The Capital Medical Society Newsletter,"* James K. Conn, M.D., Editor.

**Best Regular Feature**

The winner of this category is *"The Bulletin of the Hillsborough County Medical Association,"* Edward Pedrero, M.D., Editor.

**Special Recognition**

There were two first place winners in this category: *"Miami Medicine"* for photographs and cover illustrations, Edward St. Mary, M.D., Editor; and *"The Bulletin of the Hillsborough County Medical Association"* for a series on *"Coronary By-Pass Surgery,"* Edward Pedrero, M.D., Editor.

In reviewing all the entries, the judges noted that one county medical society bulletin in particular does an outstanding job in terms of the breadth of coverage of medical news. The judges decided to make a special award to the *"Escambia County Medical Society Bulletin"* for effectively meeting the informational needs of its members. The Editor is F. Norman Vickers, M.D.

# JFMA Announces Annual Awards

The Second Annual Journal of the Florida Medical Association Awards for County Medical Society Bulletins were presented by President O. William Davenport, M.D., and JFMA Associate Editor Clyde M. Collins, M.D., Jacksonville. In upper left photo, James K. Conn, M.D., Editor of *Capital Medical Society Newsletter,* receives the "best editorials" award for the second year in a row. C. Fenner McConnell, M.D., of Pensacola (middle left photo) accepts a special citation for the *Escambia County Medical Society Bulletin.* Editor Edward Pedrero, M.D., of *The Bulletin of the Hillsborough County Medical Association* (lower left) accepts one of three awards for his publication. The HCMA publication received awards for general excellence, best regular feature and special recognition. Ms. Gene Greenwood of the Pinellas County Medical Society (bottom center) accepts an award for most improved bulletin (two-way tie) for *PICOMESO Mail Bag.* Walter C. Jones III, M.D., (bottom right) accepts one of two awards for *Miami Medicine.* That bulletin was in a two-way tie for most improved bulletin and won a special recognition award.

Dr. Davenport introduced Mr. James J. Kilpatrick who presented the annual Baldwin Lecture.

Mr. Kilpatrick characterized the present state of the union as confused, concerned and confident. The confusion, Mr. Kilpatrick observed, is a result of general confusion at the White House; the concern may be misinterpreted; and the confidence is based on the abilities and heritage of the people of the United States.

Citing conflicting daily White House reports regarding the fuel shortage in California, Mr. Kilpatrick accused the Carter Administration of being confused on the energy issue and on the subject of inflation. The constituency of the Presidency is much different than that of a governor, Mr. Kilpatrick observed, and by acting "in a yo yo fashion," President Carter is diminishing his support.

"Offhand, I cannot think of a single influential element of American politics that Mr. Carter has not managed to offend in some manner in the past few months," he noted. Part of the problem, Mr. Kilpatrick speculated, is the fact that Jimmy Carter is a "passionless president" who is unwilling to fight for anything. The result, he predicted, will be "one term Jimmy."

The American people are concerned over arms limitations and inflation, but these concerns should not mandate a form of national health insurance, he observed. Reviewing Kennedy's proposed health care plan, Mr. Kilpatrick stated, "There is no way, in my judgment, that his program possibly could be financed within the very attractive parameters that he offers us." He further characterized the proposed plan as "very misleading, very deceptive and very costly."

Although inflation and the energy crunch are real problems, Mr. Kilpatrick denied that they are "crises," and offered a positive forecast. "I am very confident about the future of America. The inventiveness of our country, the merits of the voluntary society, the ability of our people to come through in a pinch. All of these qualities and characteristics of the American nation are still there. They haven't disappeared in any great explosion of gloom. They're not lost in the confusion over Mr. Carter's good intentions. They're not abandoned in concerns over the rising cost of fuel and health care, and the qualities of our people are still out there."

**Mr. James J. Kilpatrick, newspaper columnist and television commentator, presented the Annual Baldwin Lecture.**

Dr. Davenport adjourned the meeting at 12:30 p.m.

# Second House of Delegates

The Second Meeting of the House of Delegates convened at 3:00 p.m., Saturday, May 26, 1979, in Ballroom A of the Diplomat Hotel, Hollywood, Florida, with Dr. Sanford A. Mullen, Speaker of the House, presiding.

Dr. Harold L. Williamson, Chairman of the Credentials Committee, reported that 249 delegates were present with 35 component societies represented, constituting a quorum, and moved the delegates be seated. The motion carried.

### Delegates

ALACHUA — O. Frank Agee, M.D.; Thomas D. Bartley, M.D.; James C. Garlington, M.D.; William T. Hawkins, M.D.; Douglas O. Jenkins, M.D.; Gerold L. Schiebler, M.D.; William C. Thomas, M.D.; Steve Westgate — Student Delegate

BAY — Philip Cotton, M.D.; James D. Nixon, M.D.

BREVARD — Hani M. Agrama, M.D.; Richard N. Baney, M.D.; Brian P. Gibbons, M.D.; Juan A. Guerrero, M.D.; Howard W. Pettengill, M.D.; Robert J. Sarnowski, M.D.

BROWARD — Robert L. Andreae, M.D.; Leroy G. Appell, M.D.; Charles H. Bechert, II, M.D.; Robert L. Berger, M.D.; Anna M. Blenke, M.D.; Robert J. Brennan, M.D.; Andre S. Capi, M.D.; Phillip A. Caruso, M.D.; Ernest Constantino, M.D.; Burns A. Dobbins, M.D.; Arthur L. Eberly, M.D.; Kenneth H. Farrell, M.D.; Paul A. Flaten, M.D.; Stanley S. Goodman, M.D.; William C. Hartley, M.D.; Wilbur F. Helmus, M.D.; David C. Lane, M.D.; George P. Messenger, M.D.; Jerry D. Moore, M.D.; Ray E. Murphy, M.D.; Raymond E. Parks, M.D.; Thomas F. Regan, M.D.; David E. Taubel, M.D.; Peter A. Tomasello, M.D.; Anthony J. Vento, M.D.; Juan S.A. Wester, M.D.; (Absent — Bruce B. Burgess, M.D.; Russell B. Carson, M.D.; Willis N. Dickens, M.D.; William M. Glantz, M.D.)

CAPITAL — Robert P. Johnson, M.D.; Nelson H. Kraeft, M.D.; George N. Lewis, M.D.; Jack W. MacDonald, M.D.; Robert N. Webster, M.D.

CHARLOTTE — (Absent — Allen Baver, M.D.; T. Civitella, M.D.; Melvyn J. Katzen, M.D.)

CITRUS-HERNANDO — W. Randall Jenkins, M.D.; Samuel R. Miller, M.D.

CLAY — Laurin G. Smith, M.D.

COLLIER — Virgil A. Ponzoli Jr., M.D.; Donald Q. Vining, M.D.; Robert J. Wald, M.D.

COLUMBIA — (Absent Henry E. Plenge, M.D.)

DADE — Edward R. Annis, M.D.; Jerome Benson, M.D.; Enrique Bermudez, M.D.; Robert L. Beshany, M.D.; Rufus K. Broadaway, M.D.; Manuel L. Carbonell, M.D.; Edmund Cava, M.D.; Richard C. Clay, M.D.; Jack Q. Cleveland, M.D.; Vincent P. Corso, M.D.; O. William Davenport, M.D.; Joseph H. Davis, M.D.; Charles A. Dunn, M.D.; Franklin J. Evans, M.D.; Diego S. Falcon, M.D.; George R. Gage, M.D.; Maurice M. Greenfield, M.D.; Julian H. Groff, M.D.; Marshall Hall, M.D.; Joseph Harris, M.D.; James J. Hutson, M.D.; Walter C. Jones, III, M.D.; James R. Jude, M.D.; Herbert S. Kaiser, M.D.; Robert B. Katims, M.D.; Norman M. Kenyon, M.D.; Carlos G. Llanes, M.D.; Simon E. Markovich, M.D.; Roberto L. Maury, M.D.; Miguel A. Mora, M.D.; Joseph T. Ostroski, M.D.; Pedro A. Ramos, M.D.; Walter W. Sackett, M.D.; Everett Shocket, M.D.; S. William Simon, M.D.; David Sims, M.D.; Margaret C.S. Skinner, M.D.; Samuel P. Stokley, M.D.; Mario Stone, M.D.; William Straight, M.D.; Charles F. Tate, M.D.; John C. Turner, M.D.; Juan Valdes-Castillo, M.D.; Marco Villegas, M.D.; Raymond C. Walker, M.D.; Edgar W. Webb, M.D.; Harold H. Weiner, M.D.; Steven M. Weissberg, M.D.; William Wickman, M.D.; Elliot Witkind, M.D.; Edmund K. Zahn, M.D.; Sheldon Zane, M.D.; (Absent — Manuel Abella-Fernandez, M.D.; Herbert H. Davis, M.D.; Miguel Figueroa, M.D.; Abraham Gurinsky, M.D.; James K. Johnson, M.D.; Banning G. Lary, M.D.; Warren Lindau, M.D.; Ildefonso R. Mas, M.D.; Norman Pevsner, M.D.; Oscar Sandoval, M.D.; Ronald Scherr, M.D.; Janice K. Sherwood, M.D.; Douglas Slavin, M.D.; Thomas B. Turner, M.D.; Thomas J. Zaydon, M.D.; Shreve M. Archer — Student Delegate)

DESOTO-HARDEE-GLADES — Calvin W. Martin, M.D.

DUVAL — Harvey E. Bernhardt, M.D.; James L. Borland, M.D.; Yank D. Coble, M.D.; Clyde Collins, M.D.; Patricia C. Cowdery, M.D.; Wilbert L. Dawkins, M.D.; Richard C. Dever, M.D.; Charles P. Hayes Jr., M.D.; Walter G. Jarrell, M.D.; Benjamin A. Johnson, M.D.; John F. Lovejoy Jr., M.D.; Charles B. McIntosh, M.D.; Daniel B. Nunn, M.D.; John A. Rush, M.D.; Guy T. Selander, M.D.; Robert H. Threlkel, M.D.; William D. Walklett, M.D.; James W. Walker, M.D.; (Absent — Emmet F. Ferguson Jr., M.D.)

ESCAMBIA — Paul T. Baroco, M.D.; Eric F. Geiger, M.D.; Kenneth I. Holman, M.D.; Charles J. Kahn, M.D.; Charles F. McConnell, M.D.; Robert K. Wilson, M.D.; Henry M. Yonge, M.D.

FRANKLIN-GULF — Joseph P. Hendrix, M.D.

HIGHLANDS — (Absent — Donald C. Hartwell, M.D.; Glenn V. Hough, M.D.)

HILLSBOROUGH — Richard A. Bagby, M.D.; Louis E. Cimino, M.D.; Francis C. Coleman, M.D.; Richard G. Connar, M.D.; Irving M. Essrig, M.D.; John C. Fletcher, M.D.; Richard S. Hodes, M.D.; Victor H. Knight Jr., M.D.; Thomas E. McKell, M.D.; Edward Pedrero, M.D.; John K. Petrakis, M.D.; Ralph E. Rydell, M.D.; Ronald L. Seeley, M.D.; Ralph M. Stephan, M.D.; William W. Trice, M.D.; Harold L. Williamson, M.D.; Woody N. York, M.D.; John A. Baker — Student Delegate.

INDIAN RIVER — Donald L. Ames, M.D.; Ferdinand F. Becker, M.D.

LAKE — Frederick C. Andrews, M.D.; James M. Hardy, M.D.; Robert H. Hux, M.D.

LEE — Cecil C. Beehler, M.D.; Larry P. Garrett, M.D.; John S. Hagen, M.D.; H. Quillian Jones Jr., M.D.; Marcus M. Moore, M.D.; (Absent — Michael J. Murray, M.D.)

MADISON — (Absent — Adolfo G. Dulay, M.D.)

MANATEE — Robert E. Blackwood, M.D.; Thomas R. Busard, M.D.; Sanford Elton, M.D.; Keith J. Lassen, M.D.

MARION — C. Brooks Henderson, M.D.; Samuel L. Renfroe, M.D.

MARTIN — Fred S. Carter, M.D.; William A. Newson, M.D.

MONROE — Ronald H. Chase, M.D.; (Absent — Herman K. Moore, M.D.)

NASSAU — (Absent — Jose L. Castillo, M.D.)

OKALOOSA — David R. Arrowsmith, M.D.; Eugene R. Valentine, M.D.

ORANGE — Clifford C. Bailey, M.D.; Clifford D. Bidwell, M.D.; Clarence H. Brown, III, M.D.; Francis M. Coy, M.D.; Clarence M. Gilbert, M.D.; Alberto J. Herran, M.D.; Wm. Edward Hoffmeister, M.D.; David L. Mackey, M.D.; Joseph G. Matthews, M.D.;

Franklin B. McKechnie, M.D.; Hector Mendez, M.D.; J. D. Moore, M.D.; James F. Richards Jr., M.D.; Edward W. Stoner, M.D.; T. Byron Thames, M.D.; Robert B. Trumbo, M.D.

OSCEOLA — George A. Gant, M.D.

PALM BEACH — Vernon B. Astler, M.D.; Richard C. Cavanaugh, M.D.; John D. Corbitt Jr., M.D.; Lee A. Fischer, M.D.; J. Russell Forlaw, M.D.; Luis R. Guerrero, M.D.; James T. Howell, M.D.; V. A. Marks, M.D.; Charles E. Metzger, M.D.; Benjamin Moore, M.D.; Roger D. Petersen, M.D.; Reginald J. Stambaugh, M.D.; Ben R. Thebaut Jr., M.D.; Arthur L. Trask, M.D.; Dick L. Van Eldik, M.D.

PANHANDLE — Herbert E. Brooks, M.D.; James T. Cook Jr., M.D.

PASCO — Nessan McCann, M.D.; (Absent — Morris L. Saperstein, M.D.)

PINELLAS — William W. Atkinson, M.D.; Thomas M. Daniel, M.D.; Robert L. Dawson, M.D.; Michael H. Diamond, M.D.; Charles K. Donegan, M.D.; Irwin L. Entel, M.D.; Kay Knight Hanley, M.D.; David S. Hubbell, M.D.; Morris J. LeVine, M.D.; Donald I. MacDonald, M.D.; Jack A. MaCris, M.D.; Frank I. Mendelblatt, M.D.; J.H. Miller, M.D.; Donald G. Nikolaus, M.D.; Rex Orr, M.D.; John P. Scheuren, M.D.; Frederick O. Smith, M.D.; (Absent — David T. Overbey, M.D.)

POLK — Salvadore J. Barranco, M.D.; Frank J. Fischer, M.D.; Clyde E. Gibson, M.D.; John W. Glotfelty, M.D.; Paul A. Tanner, M.D.; (Absent — Allan Erde, M.D.; Stanley W. Lipinski, M.D.)

PUTNAM — Roy E. Campbell, M.D.

ST. LUCIE-OKEECHOBEE — William H. Meyer Jr., M.D.; Bruce E. Mills, M.D.

SANTA ROSA — (Absent — William N. Watson, M.D.)

SARASOTA — John N. Carlson, M.D.; Lee S. Harris, M.D.; Samuel E. Kaplan, M.D.; Kenneth C. Kiehl, M.D.; Martin F. Mihm, M.D.; Franklin Pfeiffenberger, M.D.; Richard C. Rehmeyer, M.D.; (Absent — Karl R. Rolls, M.D.)

SEMINOLE — Luis M. Perez, M.D.; Frederick J. Weigand, M.D.

SUWANEE-HAMILTON-LAFAYETTE — (Absent — Hugo F. Sotolongo, M.D.)

TAYLOR — John A. Dyal, M.D.

VOLUSIA — William R. Jones, M.D.; Frank J. Lill, M.D.; Alvin E. Smith, M.D.; Richard W. Snodgrass, M.D.; Charles A. Stump, Stump, M.D.; James G. White, M.D.

WALTON — (Absent — Howard F. Currie, M.D.)

WASHINGTON — (Absent — John T. Grace, M.D.)

SPEAKER OF THE HOUSE — Sanford A. Mullen, M.D.

VICE SPEAKER — James B. Perry, M.D.

Dr. Mullen requested Dr. O. William Davenport, President, and Dr. Robert E. Windom to come to the podium to present the Distinguished Layman Award.

## Distinguished Layman Award

## Rev. Hal Marchman

Whereas, The Rev. Hal Marchman of Daytona Beach, Florida, has devoted 20 years serving the needs of members of the Central Baptist Church and the people of Volusia County as a spiritual leader and compassionate advocate for those less fortunate members of society; and

Whereas, Mr. Marchman has consistently acted to fill needs within his community; was influential in establishing the Suewart Treatment Center for Alcoholics in Daytona Beach of which he is Board Chairman; served as a prisoner advocate on the "God Squad" appointed by the Sheriff; aided the destitute as a member of the Board of Directors of the Family Welfare Association; served as a Director of the Community Service Council, and

**Rev. Hal Marchman of Daytona Beach receives FMA's Distinguished Layman Award from President O. William Davenport, M.D.**

Whereas, This esteemed man of the cloth has been recognized for his service and appointed to serve on the Governor's Task Force on Narcotics, Dangerous Drugs and Alcohol, Region #4; and was appointed by Governor Rueben O'D. Askew to serve on the five member Board of Governors of the Halifax Hospital Medical Center; and

Whereas, Mr. Marchman has been active in the long range planning of programs affecting the delivery of health care in the Halifax Taxing District; and

Whereas, Mr. Marchman has served on the Board of Directors of Olds Hall dedicated to the care of retired members of the clergy and missionaries; and has served as a member of the Volusia County Hearing Society; and has served as President of the YMCA; and

Whereas, Mr. Marchman, a graduate of the Southern Baptist Theological Seminary has been Pastor of Central Baptist Church in Daytona Beach for 20 years; and

Whereas, Under Mr. Marchman's leadership, the Central Baptist Church is sponsoring the construction of a 120-unit housing complex for retired citizens; therefore be it

RESOLVED, That upon the full support and recommendation of the Volusia County Medical Society, and by unanimous vote of the Board of Governors, the Florida Medical Association at its 105th Annual Meeting at Hollywood, Florida, May 23-27, 1979, present to the Rev. Hal Marchman its Distinguished Layman Award.

Rev. Marchman expressed his appreciation for the award and encouraged the physicians to continue to look after their own business and not let anyone else regulate them.

Dr. Davenport presented the Second Annual FMA Awards for Excellence in Medical Journalism to the following:

In the category of Newspapers, circulation over 50,000, Mr. Bentayou of the Tampa Tribune for numberous articles published during 1978 regarding various aspects of health care.

In the category for Newspapers with circulations under 50,000, Mary Beth Herzog from the Vero Beach Press Journal for a series of articles that appeared monthly during 1978 considering such subjects as depression, allergies, insect stings and arthritis.

In the category designated for television, Ron Clark of Channel 7 Television in Largo for a feature length film report on cardiac care, function, stress testing and cardiac catherization.

In the category designed to recognize outstanding journalists in radio, Risa Jill Miller of WINZ Miami for research and production of a series of health information programs entitled *"Lifeline"* which are broadcast five times daily.

In the magazine category, Jill Maunder of *The Floridian* in St. Petersburg, for an article she authored dealing with the many aspects of cancer.

This year the judges also selected 10 journalists to receive certificates of honorable mention as recognition of outstanding examples of medical journalism, they are: Richard Koenig of the *St. Petersburg Times;* Andrea Murray of the *Today Newspaper* in Cocoa; Barbara Pusch of the *Palm Beach Post;* Deborah L. Ibert's articles which appeared in the *Tampa Times;* the staff of the *Hollywood Sun-Tattler;* and Barbara Taylor of the *Daytona Beach Morning Journal.*

In the magazine category two publications from Sarasota have been singled out for recognition. Richard J. Field, writing in *Sarasota Scene* and Ingrid Yates for articles which appeared in the *Sarasota Town Country.*

Art Carlson, with WPLG Television in Miami is honored for a series of news spots dealing with a variety of health topics, and Paul Henderson of Miami radio station WIOD, for an indepth program examining CAT Scans.

Dr. Davenport requested Dr. Robert E. Windom, Secretary, to read a Resolution in Grateful Recognition to be presented to Jere W. Annis, M.D., for his forty years of dedication to the pursuit of excellence and quality in medical care.

## In Grateful Recognition
## Jere W. Annis, M.D.

Whereas, Jere W. Annis, M.D., over a span of some forty years has exemplified the highest level of dedication to the pursuit of scientific excellence and quality medical care, and to the free enterprise system of health care delivery, and

Whereas, The tireless energies and abilities of this dedicated physician propelled him continually upward as an outstanding leader, and

Whereas, This articulate spokesman has distinguished himself through service to organized medicine in many elected and appointed capacities at all levels, including: Past President, American Group Practice Association; Past President of the FMA; a member and Vice Chairman of the Board of Trustees of the American Medical Association; and the AMA Executive Committee and Chairman of the Finance Committee, and

Whereas, During his tenure as Chairman of the AMA Finance Committee, Dr. Annis' tenacious efforts contributed significantly to restoring financial stability to a financially troubled AMA, and

Whereas, This highly respected physician has earned the plaudits of his fellow physicians and numerous other professional organizations which have benefited from his time proven abilities and his selfless acceptance of responsibility in working for the benefit of his profession and the betterment of his community, therefore be it

**A resolution of grateful recognition was presented at the second session of the House of Delegates to Jere W. Annis, M.D., of Lakeland (right). With Dr. Annis is FMA President FMA O. William Davenport, M.D. Dr. Annis is a Past President of FMA and a former Trustee of the American Medical Association.**

RESOLVED, That the Florida Medical Association convey to Dr. Annis its grateful appreciation and commendation for his contributions to the enduring quality and integrity of the most noble of all professions and for his exemplary performance in all undertakings over four decades of service, and be it further

RESOLVED, That the FMA extend its most heartfelt wishes to Dr. Annis and his lovely wife and companion, Tink, for their future happiness and fondest of reflections on such a distinguished and rewarding career.

Dr. Davenport recognized Dr. W. Harold Parham, D.H.A., Executive Vice President of the Florida Medical Association for his 30 years of service to the FMA. Dr. Parham joined the Florida Medical Association staff in 1949 as the Public Relations and Legislative Director and became Chief Executive Officer 21 years ago. Dr. Davenport commended Dr. Parham for how he is aggressive in new ideas, unafraid of change, thrives on different problems, yet thoroughly dedicated to the preservation of the integrity of the Florida Medical Association and its philosophical ideals. He provides outstanding management for our affiliates, ie., Secretary-Treasurer/E.V.P. of the Florida Medical Foundation; Attorney-in-Fact for the Florida Physicians Insurance Reciprocal; Chairman of the Board of Directors of PIMCO, and Assistant Treasurer of FLAMPAC. In 1974, at an unprecedented convocation, he was awarded a Doctorate of Health Administration by the University of Florida, with Deans of all three medical schools participating.

FMA President O. William Davenport, M.D., of Miami, presents the 1979 FMA Awards for Excellence in Medical Journalism. Recipients were: Upper left—Frank Bentayou of The Tampa Tribune (newspapers with over 50,000 circulation); Upper right—Mary Beth Herzog of the Vero Beach Press Journal (newspapers under 50,000 circulation); Lower left—Ron Clark of Channel 7 Television in Largo; Lower right—Risa Jill Miller, WINZ-Radio, Miami. Each winner received a certificate and cash award of $500.

Dr. Davenport requested Mary Parham, escorted by Dr. Samuel M. Day and Dr. Jere W. Annis to come to the podium to receive a portrait of Dr. Parham.

Dr. Davenport called on Dr. Vernon Astler, Chairman of the Florida Insurance Reciprocal, to give a report to the delegates. Dr. Astler stated that the Reciprocal has done very well this year and that approximately 6,000 physicians are presently insured, with three levels of coverage now being available to doctors. He noted that the total expense of operating this program was less than 7%. After the first year of operation, the Reciprocal was able to declare a dividend of 7.35% of the 1978 premium and during 1979 the Reciprocal declared two dividends to the policyholders for a total of 2¼ million dollars. Dr. Astler presented various slides showing the frequency of claims and the leading causes of malpractice claims.

**FMA President O. William Davenport, M.D., presents an informal portrait of FMA Executive Vice President W. Harold Parham, D.H.A., to Mrs. Parham.**

Dr. Mullen, Speaker, called on Dr. William W. Thompson, President of FLAMPAC, to come to the podium to make a special award. Dr. Thompson announced that the greatest percent increase of FLAMPAC membership 1978 over 1977 goes to Duval County. The largest percent of County Medical Societies members who are also FLAMPAC members goes to Taylor County which has a 91.6% membership. The FLAMPAC Presidential Award for sustained consistent participation goes to Lee County which is consistently over 60%.

Dr. Mullen requested Dr. Burns Alan Dobbins Jr., to come forward to receive the Certificate of Merit. Dr. Dobbins accepted the Certificate and expressed his pleasure and gratitude for this honor.

## Certificate of Merit
## Burns Alan Dobbins, M.D.

Whereas, Burns Alan Dobbins Jr., M.D., has ministered to sick children of Broward County and has been a loyal member and leader in the Florida Medical Association for 33 years, and

Whereas, This affable pediatrician was born in Birmingham, Alabama, attended the University of Florida (1932-35), received his M.D.degree from Temple University School of Medicine (1939); and had internship and residency training at Philadelphia General Hospital (1939-1941) and Columbia Presbyterian (1942), and

Whereas, Lieutenant Commander Burns A. Dobbins Jr., served with distinction in the Medical Corps of the United States Navy (1942-46); and

Whereas, In 1946, This Southern gentleman moved to Fort Lauderdale, Florida, and began his career that would win him a legion of friends throughout the United States in his lifetime; and

Whereas, This pillar of his community was a founder and Past President of his local Civitan Club; Vice President of the Junior Chamber of Commerce, Chairman of the Public Health Division of the Council of Social Agencies, Medical Advisor to the Boy Scouts; a board member of the Exceptional Children School, a board member of the Easter Seal Clinic; a board member of the Broward County Mental Health Society; and a board member of the Sun Dial and Oral Schools, and

Whereas, "Dobbie", as he is affectionately called by his friends, in 1976 was accorded the singular honor of being designated Broward's Physician of the Year by the exclusive Cauducean Society; and

Whereas, This esteemed physician has served as President of the Broward County Medical Association and the Florida Pediatric Society; and

Whereas, He has served as a member and Chairman of the Judical Council of the American Medical Association and as a member of the AMA Council on Medical Services and as a member of the House of Delegates of the AMA representing Florida for many years, and

Whereas, Dr. Dobbins is a former member of the National Blue Shield Board and served as the first Chief of Staff of Plantation General Hospital in Broward County, and

Whereas, This gregarious individual is active in many other business, civic, religious, professional and social endeavors, and

Whereas, His keen wit and charming sense of humor have endeared him to all who know him; therefore be it

RESOLVED, That a Certificate of Merit, the Florida Medical Association's highest honor, be presented to Burns Alan Dobbins Jr., M.D. in recognition of his many achievements and as a reminder of the affection and respect in which he is held by the Officers, members and staff of the Association.

Dr. Mullen requested that the members of Reference Committee No. V come to the podium to give their report.

Burns A. Dobbins, M.D., of Fort Lauderdale, is escorted (left picture) to the Speakers Table by Arthur Eberly, M.D., of Lighthouse Point, to receive the FMA's highest honor, the Certificate of Merit, from House Speaker Sanford A. Mullen, M.D. (center picture). At right, "Dr. Dobby" responds with the sense of humor for which he is so well known. Dr. Dobbins is a longtime delegate to the American Medical Association. He has served both the AMA and the FMA in many posts.

Deans Hollis G. Boren of the University of South Florida College of Medicine, Tampa (seated left), and William B. Deal, M.D., of the University of Florida College of Medicine, Gainesville (seated right), were honor guests at the Annual Deans' Luncheon during the Annual Meeting. Between them is FMA President O. William Davenport, M.D., Miami. Standing: FMA Secretary Robert E. Windom, M.D., Sarasota; Chairman Yank D. Coble, Jr., M.D., of the Council on Scientific Activities, Jacksonville; Immediate Past President Louis C. Murray, M.D., Orlando; and O. Frank AGee, M.D., Gainesville, Chairman, Committee on Continuing Medical Education. Dean E. M. Papper, M.D., of the University of Miami School of Medicine, was unable to attend the luncheon.

An orientation session was conducted for Chairmen of Reference Committees of the House of Delegates. Seated (left to right): FMA President O. William Davenport, M.D., Miami; House Speaker Sanford A. Mullen, M.D., Jacksonville; and Vice Speaker James B. Perry, M.D., Fort Lauderdale. Standing: Richard C. Clay, M.D., Miami, Chairman, Reference Committee I; David S. Hubbell, M.D., St. Petersburg, Reference Committee V; Paul A. Tanner Jr., M.D., Auburndale, Reference Committee II; Francis C. Coleman, M.D., Tampa, Reference Committee IV; FMA Secretary Robert E. Windom, M.D., Sarasota; and Richard B. Moore, M.D., West Palm Beach, Reference Committee III.

# Report of Reference Committee No. V Medical Economics

Dr. David S. Hubbell, Chairman, and his committee came forward to present the report of Reference Committee No. V, Medical Economics.

**Report E**
**of the**
**Board of Governors**

**RESOLUTION 79-15**
**Workmen's Compensation Medical and Surgical Fee Schedule**
**Lee County Medical Society**
and
**RESOLUTION 79-24**
**Workmen's Compensation Funds**
**Brevard County Medical Society**

In Report E of the Board of Governors the Reference Committee considered the item on Workmen's Compensation, along with Resolution 79-15 and Resolution 79-24 that deal with the same subject. Recommendation No. E-1 pertaining to Workmen's Compensation was amended to insert the word, "and" between the words "Medical" and "Surgical". A motion from the floor carried to amend Recommendation E-1 by inserting the word "satisfactory" between the words "no" and "adjustment".

The motion of the Reference Committee that Recommendation E-1 be adopted as amended carried. The motion of the Reference Committee that Resolution 79-15 and 79-24 not be adopted carried.

**RESOLUTION 79-7**
**Health Systems Agencies**
**Manatee County Medical Society**

Recommendation No. E-2 was reviewed by the Reference Committee, along with the HSA Monitoring Plan included in the packets, and Resolution 79-7 which deals with the same subject.

The motion of the Reference Committee that Recommendation No. E-2 be adopted carried. The motion that Resolution 79-7 not be adopted carried.

The motion of the Reference Committee that Recommendation No. E-3 in the Board Report be adopted carried.

The motion that Report E of the Board of Governors be adopted as amended carried.

David S. Hubbell, M.D., of St. Petersburg (standing) presided over the hearings and deliberations of Reference Committee V (Medical Economics). Others are (left ro right): C. Fenner McConnell, M.D., Pensacola; Karl R. Rolls, M.D., Sarasota; Ms. Marcia Protheroe, Jacksonville, Recorder; Manuel L. Carbonell, M.D., Miami; and Franklin B. McKechnie, M.D., Winter Park.

## Report E
## of the
## Board of Governors

O. William Davenport, M.D., Chairman

### 1978 House of Delegates Referrals

**Resolution 77-25 — Medicare — Blue Shield** — At its meeting in 1977, the House of Delegates referred the first "Resolved" of Resolution 77-25 to the Board of Governors. This "Resolved" provided that if Blue Shield is forced by the federal government to release information on physician fees, the FMA requests Blue Shield to terminate its contract as fiscal intermediary for Medicare Part B at the earliest possible date.

The Supplemental Report of the Board of Governors submitted to the House in 1978 regarding Resolution 77-25 called for the FMA to withdraw sponsorship and endorsement of Blue Shield of Florida, Inc., serving as the fiscal intermediary for Medicare Part B, in the areas of Florida which it serves; further, that Blue Shield of Florida, Inc., be requested to terminate its contract with the federal government as fiscal intermediary for Medicare Part B, at the termination of its present contractual obligation and in no event later than one year; and further that in the event that Blue Shield of Florida is unable to accomplish this in one year, then it would become necessary for the FMA, through action of the House of Delegates, to terminate its affiliation with Blue Shield of Florida, Inc.

The House of Delegates at its meeting in May 1978 adopted a substitute motion to refer the Supplemental Report of the Board of Governors concerning Resolution 77-25 to a committee composed of representatives of the Florida Medical Association Board of Governors and the Blue Shield Board of Directors.

The Committee was directed by the House to investigate and report back to the House of Delegates at its meeting in 1979, the existing contracts between Blue Shield and the federal government, to determine and report the implications of Blue Shield withdrawing from all federal contracts and to determine and report the implications of FMA withdrawing sponsorship of Blue Shield of Florida.

Pursuant to the instructions of the House, an Ad Hoc Committee on Blue Shield was appointed composed of three representatives of the FMA Board of Governors and three representatives from the Board of Directors of Blue Shield. The report of the findings of this Committee is included in the Delegates' Handbook.

**Workmen's Compensation** — The House of Delegates at its meeting in 1978 requested the Board of Governors to establish a date by which time the Workmen's Compensation Bureau should have accumulated sufficient data concerning workmen's compensation fees to enable them to comply with the law and compensate at the usual and customary fee. The House directed that this date be reported to the House at its meeting in 1979, and that if the usual and customary compensation is not implemented by the date established by the Board that appropriate action be taken.

Dr. James Richards, Chairman of the Council on Medical Economics, has made diligent efforts to bring about levels of reimbursement for physicians' services for workmen's compensation at the usual and customary level. Since it was anticipated that action may be taken regarding the workmen's compensation fee schedule, during the 1979 session of the legislature, the Board concurred with the concensus of the Council on Medical Economics that no action be taken pending the outcome of activities by the legislature, but that if nothing is done, a request for an increase be prepared.

### RECOMMENDATION NO. E-1

**THAT THE FMA AWAIT THE OUTCOME OF THE 1979 LEGISLATURE AND IF NO SATISFACTORY ADJUSTMENT IS MADE IN THE WORKMEN'S COMPENSATION MEDICAL AND SURGICAL FEE SCHEDULE THAT A PETITION BE INITIATED TO REQUEST AN INCREASE IN THE FEE SCHEDULE.**

### Board Actions of Major Importance

**Dual Fee Schedule** — Advised the Department of HEW of the action by the House of Delegates reaffirming FMA's policy of opposition to dual fee schedules in any form.

**Resolution 78-25 — Health Insurance Claim Forms** — The House of Delegates at its meeting in 1978 adopted Resolution 78-25, introduced by James L. Borland, M.D., Delegate, regarding the law passed by the 1977 Legislature prescribing a single standardized health claim form to be used by all physicians and pharmacists and a standard health claim form to be used by all hospitals, which shall be accepted by all insurors and the Department of Health and Rehabilitative Services. The form adopted is essentially the one developed by the American Medical Association Council on Medical Services and other national groups.

Resolution 78-25 directed that the FMA communicate to the Insurance Commissioner of the State of Florida the urgent need for removing the prohibition of attachments to the health insurance claim form and that the FMA petition the Florida Hospital Association to join in this request to the Insurance Commissioner; further, that due to the planned implementation of this act on July 1, 1978, these resolves be carried out immediately.

Pursuant to instructions of the House, representatives of the FMA met with the Insurance Commissioner and others in his office on several occasions in an effort to resolve the problem of attachments. However, in developing rules for implementation of the law, the department made no provision to allow attachments other than for a signature authorization form. Physicians using "pegboard" or "superbills" testified at a public hearing held at the request of FMA that not allowing attachments to the claim form would increase their office overhead which would by necessity be passed on to patients.

In his final ruling regarding implementation of the law which became effective November 29, 1978, the Insurance Commissioner allowed that physicians could use either the standardized health claim form approved by the AMA Council on Medical Services or an optional modified claim form which permits the utilization of the top one-half inch for interoffice accounting procedures and allows pre-printing of procedure codes in Section 24. No extension for implementation of the law was granted; therefore, anyone not using the standardized claim form is not in compliance with the law.

The FMA is requesting the 1979 Legislature to pass an amendment to the existing law which would allow use of attachments, provided these contain the information called for in the standardized claim form.

**Florida Relative Value Studies** — Authorized the Department of HRS to utilize the 1975 FMA Relative Value Studies and its 1977 supplement throughout the Department for uniform coding and nomenclature.

**PMUR Procedures** — Directed that the procedures currently being followed for conducting Peer Medical Utilization Review by the Florida Medical Foundation through its contract with Blue Shield of Florida be revised to insure that the Peer Review process is being carried out in the most appropriate manner, including adequate safeguards for the protection of an individual physician undergoing the voluntary PMUR process with strict administration of this process by his peers.

### FMA Councils and Committees

### COUNCIL ON MEDICAL SYSTEMS

**AMA HSA Activities** — Requested FMA's Committee on HSA's to include in its activities efforts to urge the American Medical Association to put maximum emphasis on monitoring HSA activities both nationally and regionally, and keeping state medical associations better apprised of what is taking place both at the national and state level relative to the implementation of PL 93-641.

**FMA Member Activity Regarding HSA** — Concurred that the FMA membership be informed that PL 93-641 is the law of the land and each member should become aware of this law and be willing to serve on HSA's so that the full burden of participation is not left on the shoulders of just a few physicians.

**HSA key Contact Physicians** — Recommended that each county medical society appoint a key contact physician for each officer and committee chairman of each HSA.

**HSA Monitoring Plan** — The Board reviewed the proposed HSA monitoring plan submitted by the Committee on HSA.

#### RECOMMENDATION NO. E-2

**THAT THE STATE AND LOCAL HSA MONITORING PLAN (INCLUDED IN THE DELEGATES' PACKETS) BE IMPLEMENTED AND THAT EACH COUNTY MEDICAL SOCIETY BE STRONGLY URGED TO IMPLEMENT THE MONITORING PLAN AT THEIR LOCAL LEVEL.**

**County Medical Society Staff** — Recommended that county medical societies send a member of their executive staff to each monthly HSA regional board meeting whenever feasible.

**Local HSA Authority** — Directed that every effort be made during the next session of the Legislature to assure that the maintenance of authority for health planning remains at the local level with local autonomy.

**Consortium for Health Planning** — Approved a cooperative effort between the FMA, the Florida Osteopathic Medical Association, the Florida Hospital Association, and the Florida Pharmaceutical Association in order to develop a unified front in meeting the challenges of health planning.

**Health Planning Newsletter** — Approved in principle, subject to appropriate budgetary controls, publication of a Health Planning Newsletter on a bi-monthly or quarterly basis to be sent out to the FMA membership.

**HSA Training Program** — Requested that the appropriate AMA department conduct a training program on HSA problems in Florida for physician members of HSA's who express a desire to participate on HSA boards and committees.

**Peer Review Private Industry** — Authorized the Committee on Medicaid and Foundations, in consultation with the local county medical societies, to pursue talks with the Stromberg-Carlson Corporation and the Tampa Electric Company to perform Peer Review for their self-insured health care programs.

**Public Health Study** — Recommended that Governor Graham be asked to establish a Blue Ribbon Committee to include practicing physicians to study public health in Florida for the purpose of improving public health service delivery and development of proposed legislation for the 1980-81 session of the Florida Legislature.

**HSA Providing Medical Care** — Approved the position that all grant applications for the provision of medical care be considered on the merits of the application and no County Health Department be excluded from full consideration of its application.

**Survey on Health Claim Forms** — Authorized a postal card survey be mailed with the FMA *Briefs* to obtain information on the current methods used in physician's offices for handling health insurance claims.

### COUNCIL ON MEDICAL ECONOMICS

**Exorbitant Fees** — The Board was advised of the problem of exorbitant fees charged by some physicians in the state for new procedures. With the increased concern because of the publicity on the rising cost of medical care, it was recommended that exorbitant physician's fees should be addressed by the FMA.

#### RECOMMENDATION NO. E-3

**THAT THE PROPOSED RESOLUTION ON EXORBITANT FEES BE ADOPTED:**

**RESOLVED, THAT THE FLORIDA MEDICAL ASSOCIATION URGES ALL ITS MEMBERS TO EXERCISE RESTRAINT AND ATTEMPT TO ESTABLISH FEES FOR NEW PROCEDURES THAT ARE APPROPRIATE AND COST CONSCIOUS.**

## Special Ad Hoc Committee on Blue Shield

## RESOLUTION 79-3

## Blue Shield as Fiscal Intermediary for Medicare B

## Pinellas County Medical Society

and

## RESOLUTION 79-29

## Change in Legal Structure of Blue Shield

Irving M. Essrig, M.D., Delegate

Richard C. Clay, M.D., Delegate

Dr. Charles Kahn made the motion from the floor that the report of the Special Ad Hoc Committee on Blue Shield be filed as information and that substitute Resolution 79-29, which encompasses the Recommendations of the Ad Hoc Committee and the amendments proposed by Reference Committee V, be adopted. The motion carried unanimously that the report of the Special Ad Hoc Committee on Blue Shield be filed as information.

The motion of the Reference Committee that Resolution 79-3 not be adopted carried.

The motion carried unanimously that Substitute Resolution 79-29, Change in Legal Structure of Blue Shield, be adopted.

#### SUBSTITUTE RESOLUTION 79-29

**Change in Legal Structure of Blue Shield**

RESOLVED:

1. That it is desirable and advantageous for both physicians and their

patients that Blue Shield continue in its role as Fiscal Intermediary for Medicare Part "B" in the State of Florida.

2. That the House of Delegates reiterate FMA support of Blue Shield as a cost effective health insurance plan and encourage its members to continue as Participating Physicians.
3. That the FMA House of Delegates approves a mutually agreed upon dissolution of FMA sponsorship of Blue Shield and the implementation of an orderly transition providing for the legal autonomy of Blue Shield of Florida.
4. That a liaison committee of the Florida Medical Association be established to develop an adequate and effective forum for continued interchange between the organizations with special attention to the protection of the health insurance needs of the people of Florida.

## Council on Medical Economics

The report of the Council on Medical Economics was reviewed. Dr. James F. Richards Jr., was applauded for his exhaustive efforts in the area of medical economics.

The motion of the Reference Committee that the report of the Council on Medical Economics be adopted carried.

## Council on Medical Economics

James F. Richards Jr., M.D., Chairman

The Council on Medical Economics was very busy during 1978-79 as many of the areas of responsibility of the Council came under the scrutiny of the Legislature. These included the cost of medical care, uniform fee schedule for physicians' services and major revision of the Workmen's Compensation Law which will be "sunset" in 1979. Because of the size of the Council (only three members), the Council found it more expedient to conduct its business via telephone conferences and held conferences on September 21, 1978, and March 20, 1979.

The Chairman of the Council also served on the State Advisory Council for Workmen's Compensation and attended meetings on November 28, 1978, and January 31, 1979. The Chairman was also appointed to a Workmen's Compensation Hospital Advisory Council which was charged with developing a fee schedule for hospital services covered by Workmen's Compensation insurance. This Council met several times in 1978 and 1979.

The Council on Medical Economics recommended that a brochure telling Medicine's side of the rising cost of medical care be developed and made available to members of the FMA for distribution to their patients.

**Workmen's Compensation** — The Bureau of Workmen's Compensation began an attempt to collect data on usual and customary charges by requesting physicians to include this information when filing Workmen's Compensation claims. The purpose of collecting this data was to enable the Bureau to analyze the Workmen's Compensation medical and surgical fee schedule in comparison to usual and customary fees. We agreed to encourage physicians to cooperate with this effort intended to facilitate regular updating of the medical and surgical fee schedule. However, after six months of attempting to collect usual and customary fee data, it was reported to us that only one out of fifty Workmen's Compensation claims (2%) included the requested information on usual and customary fees. This was a tremendous setback because six months of time was wasted with an invalid amount of data collected.

During the Legislature's activity to rewrite the Workmen's Compensation Law, we have worked with the Tallahassee legislative staff in developing language to include in the new law which establishes peer medical utilization review for Workmen's Compensation and establishes an annual evaluation of the medical and surgical fee schedule. We will monitor very closely the activities of the Legislature in Workmen's Compensation during the 1979 Session.

**Committee on Relative Value Studies** — The Committee on Relative Value Studies, Chaired by Joel W. Mattison, M.D., held one meeting during the past year on March 10, 1979. The Committee reviewed and responded to several pieces of correspondence during the year concerning questions about the Florida Relative Value Studies. One error noted during the committee's review of correspondence was a typographical one which listed zero (0) follow-up days for Procedure 15100. This was corrected at the March 10 meeting to forty-five (45) follow-up days.

Proviso language in the 1978-79 General Appropriations Act required the Department of Administration (DOA) to develop a uniform fee schedule for physicians' services. A Task Force was established by DOA. Charles K. Donegan, M.D., and Fred A. Butler, M.D., were requested to act as resource persons for the Task Force. Twelve meetings of this Task Force were held between September, 1978, and February, 1979. With the able staff assistance of Mr. John Richardson, each of these meetings was monitored and input provided where appropriate. Since Medicaid represents approximately 70% of the DHRS budget for physician services and since federal regulation prohibits Medicaid from paying more than Medicare for medical services, the FMA recommended that the uniform fee schedule be established at the Medicare prevailing level. The final recommendations of the Task Force were:

1. To use the 1975 Florida Relative Value Studies as the basis for the fee schedule. Since the 1975 Florida Relative Value Studies does not contain relative values for all pathology procedures, the Task Force recommended adoption of the Pathology Section of the 1974 California Relative Value Studies.
2. To establish the basic uniform fee schedule at the present Vocational Rehabilitation Fee Schedule to accomplish having all programs under the same fee schedule. Basically this raises the Medicaid Fee Schedule 5% which brings all programs in line.
3. To raise the fee schedule to the fiftieth percentile to be phased in over a six-year period.
4. To evaluate the fee schedule at the beginning of each biennial budget year with recommendations for increases to be made to the Legislature based upon inflation factors.

The Committee reviewed the status of Relative Value Studies and involvement of the Federal Trade Commission and Justice Department. During this investigation, it was ironic to note that from three different sources, it was learned that the consent agreements signed by various state medical associations and national state specialty groups to cease from publishing RVS's, do not prohibit government agencies and other third parties from continuing to use the RVS's — this action only prohibits physicians from using them.

The Committee learned that it appears that the AMA's *Current Procedural Terminology Fourth Edition* will be adopted by Medicare in an attempt to establish a nationwide uniform coding and descriptor system for Medicare.

The Committee also reviewed information which resulted in the submission of a resolution concerning exorbitant fees.

**Committee on Health Insurance** — The Committee on Health Insurance, Chaired by B. Philip Cotton, M.D. has been assigned the responsibility for overseeing the Florida Medical Insurance Trust and reviewing claims under the program. A meeting has been scheduled for April 28, 1979, to orient the Committee in preparation of this assignment.

On September 18, 1978, the Committee held a telephone conference to review the Association's policy concerning second surgical opinions. The Committee recommended reaffirmation of existing FMA policy which is reported in the Board of Governors Annual Report.

The Chairman and staff have also monitored all Blue Shield Board Meetings.

**Florida Committee on the Cost of Medical Care** — Florida's contribution to the national Voluntary Effort, the Florida Committee on the Cost of Medical Care, has been very active since its formation and initial meeting on March 4, 1978. The FMA representatives on the Committee are James F. Richards, M.D., and John F. Lee, M.D. Meetings of the Committee were held on April 25, 1978, June 21, 1978, August 10, 1978, September 19, 1978, November 28, 1978, January 16, 1979, and February 27, 1979. An additional meeting is planned for April 3, 1979.

The Committee and staff have developed a program on cost awareness which will be aimed at hospital medical staffs and will be ready for distribution in April, 1979. Additionally, the Committee is releasing public service announcements for radio and television on patient lifestyles. In conjunction with these announcements a brochure is being prepared for which the public may write. These brochures will also be made available to physicians and hospitals to give to their patients. The Committee is setting up a speakers bureau in an attempt to tell the provider's side of the rising cost of medical care story. Legislative packets are being developed to provide basic information about the VE.

The Committee continued to monitor the reports of the Blue Cross Prospective Charge payment program. At last report, it was noted that the increase in hospital expenses in Florida has been reduced from a 17.7% increase in 1977 to 12.6% in 1978. The national reduction in the percentage increase in hospital expenses was approximately three percent which indicates that the Blue Cross program in Florida has been very effective. The Voluntary Effort goal was a 2% reduction of inflation of hospital costs per year.

The Committee attempted to expand its composition to include representatives from labor, industry and retired persons. All three declined involvement with the Committee.

One member of the Committee and staff attended a national symposium on the Voluntary Effort in Chicago on November 7-8, 1978.

The FMA's representatives to the Committee continued to be actively involved and provided input into the problem of the rising cost of medical care from the perspective of the physician.

## Council on Medical Systems

The report of the Council on Medical Systems was reviewed with interest. Dr. James L. Borland Jr., was commended for his diligent work in this area.

The motion of the Reference Committee that the report of the Council on Medical Systems be adopted carried.

## Council on Medical Systems

James L. Borland Jr., M.D., Chairman

The Council on Medical System has been occupied during the past year with monitoring the activities of Medicaid, State Health Planning and the HMO development, advising the FMA Board of Governors and making recommendations concerning these activities. Telephone conferences of the Council were held on September 11, 1978, and January 3, 1979. A meeting of the Council was held in Tampa on March 18, 1979. Much of the work of the Council was conducted by two of its committees, the Committee on HSA's Chaired by Charles F. Tate, M.D., and the Committee on Medicaid and Foundations, Chaired by H. Phillip Hampton, M.D.

During the past year, the Council through its Committee on HSA's has monitored the statewide implementation of P.L. 93-641 (the National Health Planning and Development Act of 1974). Particular attention has been given to the activities of the Statewide Health Coordinating Council (SHCC), the State Health Planning and Development Agency (SHPDA), the Florida Association of Health Systems Agency Executives, Inc. and the nine Health Systems Agencies (HSA's). The Committee on HSA's has either participated in or been in attendance at all meetings of SHCC subcommittees and task forces, and the Chairman has commented extensively with both written and verbal testimony on the proposed 1978 Health Plan. The Committee has met on a quarterly basis immediately following each of the meetings of the SHCC. This has enabled better coordination of the Council's effort and participation in the health planning process.

The Council has recommended a formal plan for statewide monitoring of HSA activities with specific assignments of responsibilities at local levels, statewide coordination of these activities, a mechanism for formal communication of FMA recommendations to HSA's and coordination and information sharing with similar organizations in other states. To facilitate such development of a statewide plan, the Chairman of the Committee and staff visited the Virginia State Medical Society to evaluate their very effective HSA monitoring system. The program presented to the FMA Board of Governors for consideration is similar to the Virginia plan. To increase the effectiveness of such a monitoring system, consideration has been given to a consortium on health planning of the Florida Hospital Association, the Florida Osteopathic Medical Association, and the Florida Pharmaceutical Association.

The Council remains concerned that many physicians do not understand the significance of health planning as implemented under P.L. 93-641 and the potential threat to the practice of medicine. In order to keep the FMA membership informed on developments in health planning, an HSA newsletter has been instituted to be sent out to the membership on a regular basis with the FMA *"Briefs"*.

The Council is planning to co-sponsor with the American Medical Association a seminar on techniques of negotiation for physicians who serve on HSA's.

The Committee on Medicaid and Foundations and staff, expressing the concerns of physicians with failure of timely and efficient Medicaid claims processing, devoted considerable time assisting legislators, DHRS policy-makers and the Lieutenant Governor in resolving basic Medicaid management and organizational problems. This activity involved contacting each county medical society and soliciting specific problems encountered by physicians offices with the Medicaid Program. Several hundred responses were received. The results of these efforts have emphasized the need for greater governmental emphasis on Medicaid as a major DHRS program requiring competent leadership and decisive direction. The Governor and DHRS have agreed to propose to the Florida Legislature that Medicaid be taken out of the Social and Economic Service Program Office and be established as a separate program office which will allow for: 1) easier access to top DHRS management; 2) greater internal authority and accountability; 3) increased visibility within the Department and for those outside the Department; 4) enhance the responsiveness of the Medicaid Program by improving the identification and resolution of problems; 5) allow for the recruitment of competent staff because of increase in pay grade levels, and 6) allow for better supervision of the contract with System Development Corporation, Inc.

In addition, the Governor and DHRS are proposing the discontinuation of the "all-inclusive office visit" and have requested $2,668,620 additional funds to cover the cost of this action. This will allow physicians to bill for ancillary services performed in the office such as injections and x-rays.

The Council continues to call policymakers' attention to the encouragement of outpatient care instead of costly institutional care. In addition, the Council plans to continue, in coordination with the Council on Medical Economics, efforts to change the current DHRS policy regarding Medicaid/Medicare cross-over claims as outlined by the Chairman of the Committee on Medicaid in an article published in the April *Journal of the Florida Medical Association*.

Negotiations to develop a peer review mechanism for their self-insurance program, have been opened with the Stromberg Carlson Corporation in Sanford. These negotiations in coordination with the local county medical society are continuing. The Council also has discussed the development of a pilot program with the State of Florida to consider an Individual Practice Association with peer review, for the State Employees Health Care Plan through the Florida Medical Foundation. The discussions and planning are continuing at this point.

The Chairman wishes to acknowledge the advice, devotion, and hard work of Mr. John Richardson and Mr. Philip Gilbert in implementing the activities of the Council this year. Their efforts, with the assistance of our indefatigable secretary, Ms. Marcia Protheroe, have been invaluable to the Council.

## Florida Health Data Corporation, Inc.

The Committee was impressed with the invaluable efforts of James L. Borland Jr., M.D., President, and the other representatives of this Corporation.

The motion of the Reference Committee that the report of the Florida Health Data Corporation, Inc., be adopted carried.

## Florida Health Data Corporation, Inc.

James L. Borland Jr., M.D., President

The Florida Health Data Corporation was formed as a non-profit corporation by the Florida Hospital Association, Florida Medical Association and the Florida Osteopathic Medical Association in 1977:

a) to establish and operate an independent health data bank which is accurate, timely, comprehensive, and controlled by the private sector;
b) to develop a uniform system for the collection of data throughout Florida;
c) to provide information to various organizations for the purposes of statewide health planning, PSRO evaluation, HSA planning and other health planning activities;
d) to insure that data are collected, compiled, and presented fairly and objectively;
e) to perform other activities related thereto within the scope of operations permitted by the Corporation's Articles of Incorporation as may advance the public interest in the future development of the health care delivery system;
f) to form a base for development of a statewide peer review system.

The Corporation has had a very active year with the Board of Directors meeting on July 13, 1978, October 5, 1978, November 29, 1978, and January 11, 1979. A meeting of the Board is planned for April 19, 1979. In addition the Executive Committee held meetings on September 7, 1978, February 28, 1979, and March 21, 1979.

Staff for the Corporation has been jointly provided by the Florida Hospital Association and the Florida Medical Association. Additionally, the Corporation retained Ms. Jeanne Tucker, RRA as a Consultant.

The Corporation completed a pilot study in June 1978, and began marketing the Hospital Management and Medical Information System (HMMIS) in July, 1978. There are currently twenty-six hospitals participating in the HMMIS Program. The Corporation was awarded a contract with Community Medical Services Association, Inc. (CMSA) (Florida Area II PSRO) on October 1, 1978, to provide a health data system with the capability of computer assisted data collection and retrieval to provide meaningful reports to CMSA. In working with CMSA, it is anticipated that they will be the first PSRO in Florida to file the required PSRO Hospital Data Discharge Summary (PHDDS). The Florida Health Data Corporation is very proud of this accomplishment.

With the addition of the contract with CMSA, the Corporation retained Ms. Jeanne Tucker as full-time Program Director, effective February 1, 1979.

With the update required by the federal government to the International Classification of Diseases — Ninth Edition (ICD-9-CM) Ms. Tucker has conducted two workshops for hospital record personnel in the use of this new diagnostic coding system. Ninety-four people participated in these workshops.

The Board of Directors is pleased with the progress of the Florida Health Data Corporation to date and are very optimistic about the future.

## Florida Medical Foundation — PMUR

The motion of the Reference Committee that the portion of the Florida Medical Foundation's report regarding PMUR be adopted carried. (See report of Florida Medical Foundation, page 761).

## RESOLUTION 79-9
## Medicare Financial Disclosure
## Dade County Medical Association

The motion of the Reference Committee that Resolution 79-9, Medicare Financial Disclosure, be adopted carried.

### RESOLUTION 79-9
### Medicare Financial Disclosure

RESOLVED, That the FMA support and commend the AMA House of Delegates in adopting Resolution #96, passed at the AMA House of Delegates Meeting, December 3-6, 1978 which reads:

"RESOLVED, That the American Medical Association encourage federal legislation authorizing physicians to receive copies of all communications sent by Medicare fiscal intermediaries to the physicians' patients regarding medical services rendered and reimbursement allowed, whether or not the physicians accept assignments as defined in the Medicare statute."

**RESOLUTION 79-11**
**Specialty Screens**
Faris S. Monsour Jr., M.D., Delegate
and
**RESOLUTION 79-20**
**Specialty Screens**
**Dade County Medical Association**

Since the intent of Resolution 79-11 and 79-20 were the same, the Reference Committee considered them together. As extensive testimony and discussion took place regarding these resolutions the Reference Committee spent much time in examining this subject.

The motion of the Reference Committee that Resolution 79-11 and Resolution 79-20 not be adopted carried.

**RESOLUTION 79-12**
**Eliminate Federal Funding for HSA's**
FMA Board of Governors

The motion carried to adopt Resolution 79-12 as amended.

**RESOLUTION 79-12**
**Eliminate Federal Funding for HSA's**

RESOLVED, That the Florida Medical Association petition Florida's delegation in the United States Congress to eliminate or drastically reduce the funding for HSA's, and be it further

RESOLVED, That the American Medical Association adopt a similar position and actively encourage each constituent state medical association and every component county medical society to actively urge physicians to express this view in a positive manner to each member of the Congress of the United States.

**RESOLUTION 79-21**
**Government Health Insurance**
**Dade County Medical Association**

The motion of the Reference Committee that Resolution 79-21 not be adopted carried.

**RESOLUTION 79-22**
**Medicaid Funds**
**Brevard County Medical Society**

The motion of the Reference Committee that Resolution 79-22 not be adopted carried.

**RESOLUTION 79-23**
**Vocational Rehabilitation Program — Equal Fee for All Attending Physicians**
**Brevard County Medical Society**

The motion of the Reference Committee that Resolution 79-23 not be adopted carried.

**RESOLUTION 79-25**
**Vocational Rehabilitation — Fee Adjustment**
**Brevard County Medical Society**

The Reference Committee submitted a substitute resolution for 79-25. The motion of the Reference Committee that Substitute Resolution 79-25 be adopted carried.

**SUBSTITUTE RESOLUTION 79-25**
**Vocational Rehabilitation — Fee Adjustment**

RESOLVED, That the Florida Medical Association pursue efforts to rectify the woeful inadequacies of the Department of Health and Rehabilitative Services medical and surgical fee schedule for physicians in Florida.

The Reference Committee expressed its sincere appreciation to all who came to speak before the Committee and for their valuable contributions toward assisting the Committee.

The Chairman thanked the members of the Reference Committee, Drs. C. Fenner McConnell, Karl R. Rolls, Franklin B. McKechnie, and Manual L. Carbonell for their expertise and diligence in the preparation of the report. Reference Committee V expressed its gratitude to Marcia Protheroe, recording secretary, for her faithful efforts and efficiency, and John Richardson, FMA staff, for his excellent counsel to the Committee. Special appreciation was extended to Dr. Charles K. Donegan, AMA Delegate Advisor.

The motion of the Reference Committee that the report of Reference Committee V be adopted as amended carried.

# Louise Rader and Her Editors

The Annual Editor's Dinner at the Diplomat on May 23 turned into a testimonial for Louise Rader, who was attending her 25th and final FMA Annual Meeting as an FMA employee. One after another the various editors of *The Journal of the Florida Medical Association* paid tribute to JFMA's Managing Editor, who has been putting this magazine together for the past 25 years.

In the photographs above, Mrs. Rader poses with older and younger generations of editors. Three of the four editors-in-chief under whom she has served joined in the tribute (upper left). They are (left to right): the incumbent Editor, Gerold L. Schiebler, M.D., of Gainesville; Franz H. Stewart, M.D., Miami; and Clyde M. Collins, M.D., Jacksonville. The fourth, Thad Moseley, M.D., of Jacksonville, was unable to attend.

The three young men in the right photograph got their first exposure to medical journalism through JFMA. Left to right: Jerrold A. Van Dyke, student Assistant Editor from Gainesville; Steve Westgate, student Consulting Editor from Gainesville; and Richard Snyder, student Assistant Editor from Miami. A few days later, Messrs. Van Dyke and Snyder received their M.D. degrees and bid adieu to *The Journal* as they prepared to enter residency programs.

In bottom photograph, Mrs. Rader's boss of many years, FMA Executive Vice President W. Harold Parham, D.H.A., announces Mrs. Rader's scheduled retirement before the House of Delegates as Editor Schiebler looks on. Dr. Parham presented her with a check for $1,000.

*To*

# Louise Rader
# Managing Editor

## JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION

*There's a comforting thought at the close of the day,*
*When I'm weary and lonely and sad,*
*That sort of grips hold of my crusty old heart*
*And bids it be merry and glad.*
*It gets in my soul and it drives out the blues,*
*And finally thrills through and through.*
*It's just a sweet memory that chants the refrain:*
*"I'm glad I touched shoulders with you!"*

*I am glad that I live, that I battle and strive*
*For the place that I know I must fill;*
*I am thankful for sorrows, I'll meet with a grin*
*What fortune may send, good or ill.*
*I may not have wealth, I may not be great,*
*But I know I shall always be true*
*For I have in my life that courage you gave,*
*When once I rubbed shoulders with you.*

**From all its Consultants,**
**Contributing Authors and Editors**

**May 23, 1979**

This message was on a plaque presented to our Managing Editor at the Editor's Dinner during the Annual Meeting in Hollywood.

# Report of Reference Committee No. IV Legislation and Miscellaneous

Dr. Francis C. Coleman, Chairman, and his committee came forward to present the report of Reference Committee No. IV, Legislation and Miscellaneous.

The Reference Committee reported that each item referred to it had been considered and testimony was heard from members of the FMA regarding the issues. Information given by Dr. James B. Perry, Chairman of the Council on Legislation and Regulations, was particularly helpful and enlightening.

The Committee publicly commended Dr. Perry for his outstanding work in his role as Chairman of this Council. Furthermore, the Committee gave recognition to Donald S. Fraser Jr., Director of Legislative Affairs; Mr. George S. Palmer Jr., Manager of the FMA Capital Office; Mr. Phil Gilbert, Director of Government Programs; and all other FMA staff members who had worked on the legislative program. The Committee recognized the contributions of all members of the Florida Medical Association who had participated in FMA legislative activities during the past year.

**Report D**
**of the**
**Board of Governors**

The motion that Recommendation D-1 of the Board of Governors Report be adopted carried.

The motion carried that Recommendation D-2 of the Board of Governors Report be adopted.

The motion of the Reference Committee that Recommendation D-3 of the Board of Governors Report be adopted carried.

The Reference Committee reported that Dr. James Perry had presented information to the Committee regarding legislative activities that had occurred since the preparation of the Supplemental Report of the Council. The Reference Committee noted that the number of issues in 1979 was greater than those of recent years and expressed appreciation for the effective manner with which the Board of Governors and the Council on Legislation and Regulations had addressed the problems.

The Reference Committee noted the outstanding performance of Dr. David Lane, Chairman of the Committee on State Legislation, and Dr. Louis C. Murray, Chairman of the Committee on National Legislation.

The motion of the Reference Committee that the 1979 legislative program of the Board of Governors, as set forth in these reports, be adopted carried.

The motion of the Reference Committee that Report D of the Board of Governors be adopted carried.

**Reference Committee IV conducted hearings and reported on Legislation and Miscellaneous matters. Left to right: James R. Jude, M.D., Miami; Brian P. Gibbons, M.D., Cocoa Beach; Chairman Francis C. Coleman, M.D., Tampa; Mrs. Jane Franklin, Jacksonville, Recorder; Clarence M. Gilbert, M.D., Orlando; and Walter G. Jarrell, M.D., Jacksonville.**

## Report D
## of the
## Board of Governors

O. William Davenport, M.D., Chairman

### 1978 House of Delegates Referrals

**Resolution 78-3 — Confidentiality of Medical Records** — This resolution was referred to the Board of Governors for study.

The "Resolveds" of this resolution, which was introduced by the Pinellas County Medical Society, provide:

That the FMA in collaboration with county and specialty societies formulate a model statute to be presented to the state legislature forbidding the duplication or sending of any part of any hospital patient records with the exception of the face sheet, summary and E.R. report, to any third party payer or fiscal intermediary company, and further, that the FMA continue its endeavors to protect the confidentiality of medical and psychiatric patient records in clinics, private offices, and other health agencies as well as in hospitals.

The intent of this resolution has been fulfilled by inclusion in the 1979 legislative program of support for legislation to provide confidentiality of patients' medical records with a limited number of exceptions. Under the concept supported by the FMA, a patient would have to make specific authorization for release of medical records to persons or entities not specified in the current form or notice provided in the course of an application or claim for insurance.

### RECOMMENDATION NO. D-1

**THAT RESOLUTION 78-3, CONFIDENTIALITY OF MEDICAL RECORDS, BE ADOPTED.**

**Resolution 78-16 — Mediation Panel Questionnaires** — Resolution 78-16 was not adopted but referred to the Board of Governors. The "Resolved" of this resolution called for the FMA to request the Florida Supreme Court to review the supplemental questionnaire for prospective mediation panel members to determine their appropriateness and advise the Chief Judge of the Circuit.

The Board reviewed the questionnaire and observed that it could be construed to determine the impartiality of a panel member. It was also noted that most physicians are cooperating and responding, but the Board also recognized that should the use of the questionnaire become irrelevant and intended to harass participants or mediation panels, appropriate action through the Supreme Court should be taken.

### RECOMMENDATION NO. D-2

**THAT RESOLUTION 78-16, MEDIATION PANEL QUESTIONNAIRES, NOT BE ADOPTED.**

**Resolution 78-7 — Hospital Tax District Legislation** — This resolution introduced by the Pinellas County Medical Society was not adopted, but referred to the Board of Governors for study and evaluation. The resolve of this resolution called for legislative action to require Pinellas County to set up a hospital taxing district to solve the problem of reimbursement for treating the large number of persons without financial resources in the county's hospitals, and that the FMA support any local tax district legislation originating in Pinellas County.

The Board concurred that this is an issue that should not be addressed by the FMA, but should be handled by the local medical society.

### RECOMMENDATION NO. D-3

**THAT RESOLUTION 78-7, HOSPITAL TAX DISTRICT LEGISLATION, NOT BE ADOPTED.**

### Board Actions of Major Importance

**Certificate of Need** — Directed that FMA not oppose Certificate of Need legislation, provided it doesn't include physicians' offices.

**1978 Legislative Session** — Reviewed in detail the FMA Legislative program during the 1978 session and commended those individuals directly concerned with its success.

The regular session of the 1978 Legislature ended June 2, with the FMA successful in achieving its major legislative priorities, including:

1. Provision for a constitutional separate Department of Health. The final document of the Constitutional Revision Commission contained provision for a separate Department of Health.
2. Recovery of defense costs. House Bill 1062, Recovery of Defense Costs, provided that a judge can award attorney fees "to the prevailing party in any civil action in which the court finds that there was a complete absence of a justifiable issue of either law or fact raised by the losing party."
3. Increased funding for the State Board of Medical Examiners.
4. Funding for Emergency Medical Services.
5. Continuing funding for the Comprehensive Health Education Plan.

The FMA was successful in its opposition to a rash of legislative proposals which would have an adverse effect on medicine:

- Legislation that would have eliminated mediation panels
- Certificate of Need for equipment in doctor's offices
- A proposal to create a commission to regulate hospital rate increases in Florida
- Legislation which would have expanded the authority of advanced nurse practitioners and would have eliminated the joint advisory board composed of members from the Board of Nursing and the State Board of Medical Examiners
- The legalization, manufacture, distribution, delivery, possession, and use of laetrile in Florida.
- Truth in sickness legislation that would have required disclosure of ownership in any hospital or other health care facility by physicians and other health care providers
- The Surgeons Performance History Act which would have required all hospitals and ambulatory surgical centers to maintain records on all surgeons operating in the facility as to the number, type and success rate of surgery performed within the past 10 years
- Removal of the exemption of five or less physicians from the Clinical Laboratory Act.

**Doctor of the Day Program** — Adopted strict guidelines to be followed by physicians serving as Doctor of the Day, including in the letter of instructions that the Doctor of the Day not engage in any lobbying activities.

**Constitution Revision Commission** — Extended the Association's sincere appreciation to Dr. Edward R. Annis for his diligent efforts to bring about a revision in Florida's constitution to provide for a separate Department of Health, and to commend Senator Lew Brantley for his assistance in support of a separate Department of Health which will ultimately benefit the people of Florida.

### FMA Councils and Committees

### COUNCIL ON LEGISLATION AND REGULATIONS

**1979 Legislative Session** — Approved key legislative issues affecting health to be addressed during the 1979 Session of the Florida Legislature:

- Oppose changes in the Mediation Panel Law (SB 498)
- Oppose subsidy for state employees enrolled in HMO's
- Clarification of authority for physicians to delegate functions to a trained assistant.
- Legislation to allow attachments to Standard Claim Forms
- Oppose establishment of state health data system
- Oppose Relicensure of physicians (HB 632)
- Oppose increased authority for advanced nurse practitioners (SB 1)
- Oppose legislation that would bifurcate the SBME and emasculate that Board's authority.

**Legislative Issues** — Other legislative issues affecting health addressed by the Board include:

- Oppose commission to regulate hospital rate increases
- Oppose mandatory hospital staff privileges for M.D.'s, D.O.'s, Dentists and Podiatrists.
- Support legislation to require payment for services (eg. lab.) rendered on out-patient basis (HB 477. SB 569)
- Support legislation to require health cost impact statement for laws and rules.
- Support other concepts proposed in FMA position on cost of medical care.
- Oppose certificate of need for physician's office equipment.
- Oppose mandatory reimbursement to nurse practitioners under Medicaid (SC/SB 1, HB 601)
- Oppose treble damages for physicians "marking up" lab charges (SB 58)
- Oppose surgeons performance records (SB 60)
- Oppose funding for a school of optometry
- Support legislation prohibiting use of drugs by optometrists in Florida.
- Endorsed legislation to reorganize the Patient's Compensation Fund Board of Governors so that a majority of members are from nominees of the FMA and FHA.

**Medicaid** — Approved the following objectives with regard to improvements in Florida's Medicaid program.

A. More adequate funding for the Medicaid Program, with particular emphasis on primary care services.
B. The management structure must be revised to provide more appropriate physician input and direction to the program.

**Spinal Cord Centers** — Expressed FMA support for the Florida Neurosurgical Society in its efforts to revise the rules and regulations for Florida's Spinal Cord Injury Treatment Program so that major hospitals with adequate facilities can be approved as spinal cord injury centers.

**PLI Registration of Settlements** — Directed that the FMA **not** support legislation which would require that each settlement of a professional liability insurance claim be registered in circuit court.

**Florida Senate Resolution** — Acknowledged with thanks the resolution presented to the FMA by the Senate of the State of Florida expressing appreciation for providing a Doctor of the Day during the impeachment trial of Judge Samuel S. Smith.

**Charity Work by Florida Physicians** — Received as information a proposal regarding development of a mechanism to gather information on the volume of "charity" work done by Florida's physicians and that such information receive appropriate public distribution and noted that the Editor was considering a special issue of the *Journal* devoted to this matter.

**Restaurant Inspections** — Reaffirmed the current policy of the Association that the sanitary inspection of hotels and restaurants be a part of the Public Health Division.

## Council on Legislation and Regulations

The motion of the Reference Committee that the Report of the Council on Legislation and Regulations be adopted carried.

## Council on Legislation and Regulations
## James B. Perry, M.D., Chairman

Most of the work of the Council on Legislation and Regulations is accomplished through activities of its two committees: the Committee on State Legislation and the Committee on National Legislation. The report of your Council is submitted as individual reports of the two major committees.

**Committee on National Legislation** — This committee consists of the key contact physicians for each member of the Florida delegation of the U.S. Senate and the U.S. House of Representatives. Members of this committee have kept in close touch with their assigned senators and congressmen on national legislative matters of interest to the FMA and American Medical Association.

The Association has maintained active liaison with members of the Florida Congressional Delegation on key legislative issues. Numerous conferences in Washington between FMA staff, key contact physicians and selected congressmen were necessary in order to carry out FMA and AMA policies on these issues. In addition to these individual visits, a comprehensive visitation was conducted by FMA key contact physicians and officers with the two U.S. Senators and House members who served on committees with jurisdiction over key health issues. This continuing personal liaison resulted in excellent cooperation from Florida's delegation.

The issues that necessitated major action by the FMA and contact physicians were:

1. Carter Administration proposal on hospital cost containment.
2. Proposals to require certificate of need for physician's office equipment.
3. Extension of Federal Health Planning Authority.

The Ninety-Sixth Congress promises to be increasingly active in federal health legislation. This will require the Association to continue to maintain close liaison with Florida's Congressional Delegation and the AMA Washington office.

**Committee on State Legislation** — The Committee has had another active year with responsibilities for coordinating all state legislation for the Florida Medical Association and recognized specialty groups. Four formal meetings of the committee have been held, along with informal conferences among committee members as items of an urgent nature arose.

Consistent with the policies developed by the FMA House of Delegates, the Committee has worked closely with the Board of Governors in developing our legislative program for the 1979 session of the Florida Legislature.

The following items summarize the committee's activities:

1. The legislative program is continuing to function under the supervision of Donald S. Fraser, Jr., Director of Legislative Affairs. He has been materially assisted by Mrs. Nancy Moreau, Legislative Analyst, George S. Palmer, Jr., Manager of the Capital Office and Phil Gilbeart, Director of FMA Government Programs Department. Particularly helpful to the legislative activity has been the establishment of the FMA Branch Offices in Central and South Florida. These have greatly increased the Association's ability to maintain liaison with county medical societies, contact physicians and members of the Legislature.
2. The Capitol Dispensary — The Committee placed major emphasis on working with the Capitol Dispensary which has proven to be most important in meeting the needs of legislators

and their staffs. Mrs. Delma Hart, R.N., has continued to provide excellent assistance to the FMA in coordinating the activities of the Dispensary for the Doctor of the Day program.

3. The Committee on on State Legislation is continuing to emphasize the need to develop a good key contact physician program in each county medical society in the state. A program has been undertaken to work with each county medical society in reviewing their assigned key contact physicians to make sure that the best possible physician is assigned this critical task.
4. Publications — A legislative bulletin was published every week during the legislative session and periodically between sessions. The bulletin is designed to give up-to-date information to members of the FMA who are involved in legislative activities. A listing of all bills monitored by the Capital Office is sent on a regular basis to county medical society executives and legislative chairmen. In addition, summaries and copies of key legislative proposals are distributed.
5. 1978 Legislative Accomplishments — During the 1978 legislative session, there were more than 400 legislative proposals that required action by the State Legislative Committee or the Capital Office staff. Matters of major interest to the Florida Medical Association were:

—Passage of legislation allowing for recovery of defense costs.
—Increased funding for investigative and disciplinary activities of the State Board of Medical Examiners.
—Defeat of legislation to require certificate of need for physician's office equipment.
—Defeat of "truth in sickness" legislation that would have required disclosure of ownership in any hospital or other health care facility by physicians and other health care providers.
—Defeat of proposals to require office personnel using x-ray equipment to meet standards of radiologic technologists.
—Defeat of legislation to abolish mediation panels.
—Defeat of proposals for structured fee schedule for Workmen's Compensation program.
—Defeat of proposal to establish state commission to regulate hospital rates.
—Defeat of legislation to expand authority of advanced nurse practitioners.
—Increased funding for emergency medical services programs in Florida.

6. Major Legislative Priorities for the 1979 Session — The major legislative objectives for the 1979 Session of the Florida Legislature as established by the FMA House of Delegates and the Board of Governors are:

Passage of proposals to:
—Allow attachments to standard health insurance claim form.
—Clarify law concerning functions that can be performed by a physician's trained assistant.
—Improvement in 1978 law on recovery of defense costs (SB 14).
—Improved management and increased funding for Florida's Medicaid program.
—Creation of position of assistant secretary for health, Department of Health and Rehabilitative Services, with line authority over all state and local health programming.
—Increased funding for State Board of Medical Examiners.
—Protect confidentiality of medical records.

Defeat of the following legislative proposals:
—Mandatory hospital staff privileges for M.D.'s, D.O.'s dentists and podiatrists (SB 367).
—Expansion of authority for unsupervised advanced nurse practitioners (SB 1).
—Certificate of need for physician's office equipment purchases.
—Subsidy by state funding for state employees' enrollment in HMO's.
—Increase in scope of temporary medical licensure law (HB 474).
—Establishment of a commission to regulate hospital rate increases.
—Funding for optometry school.
—"Truth in sickness" legislation (SB 77 and HB 334).
—Surgeon's performance records (SB 60).

A supplemental report will be prepared by the Committee on State Legislation and distributed prior to the first session of the House of Delegates. This supplemental report will outline up-to-date progress of the FMA legislative program made during the 1979 Legislative Session. It will also include other important state legislative items which might develop prior to the FMA Annual Meeting.

The motion of the Reference Committee that the Supplemental Report of the Council on Legislation and Regulations be adopted carried.

### Supplemental Report
### Council on Legislation and Regulations

This is to update the report of the Council on Legislation and Regulations printed in the Delegates handbook. This report reflects the staus of legislation as of May 16, 1979.

#### Legislative Status of FMA 1979 Legislative Program

1. **Modification of Mediation Panel Law (HB 1237, SB 498)** — These bills would modify the language used in reporting findings of mediation panels to the court. HB 1237 is the House Insurance Committee. SB 498 is in the Senate Commerce Committee.

2. **Subsidy for State Employees Enrolling in HMOs** — This proposal calls for an increased state contribution to state employees for insurance coverage if they elect to enroll in an HMO. To date no funds have been appropriated and neither House nor Senate committees have adopted statutory authorization.

3. **Clarification of Authority for Physicians to Delegate Functions to Office Personnel (HB 1097, SB 863)** — These bills would remove the ambiguity created by an Attorney General's opinion relative to whether the Board of Nursing or the Board of Medical Examiners has jurisdiction over physician delegation of tasks to office personnel. HB 1097 is in the House Committee on Regulatory Reform and SB 863 is in the Senate HRS Committee. The issue is also being debated in the rewrite of the medical and nursing practice acts required by Florida's "Sunset" law.

4. **Attachments to Standard Health Claim Form (HB 894, SB 1222)** — HB 894 is on the House Calendar and SB 1222 is on the Senate Calendar.

5. **Proposal to Establish State Health Data System** — This concept, which is opposed by the FMA, has not been included in any legislation adopted by committees in either the House or the Senate.

6. **Recertification of Physicians (HB 632)** — HB 632 would require recertification of physicians every 7 years by means of passing a written exam. It is in the House Committee on Regulatory Reform.

7. **Commission to Regulate Hospital Rate Increases (CSHB 619 and 917)** — This issue has passed the House and Senate in different forms. It is now in a joint conference committee. The House version exempts physicians who bill on a fee for service basis and contains authority for a separate commission to reject proposed hospital budgets. The Senate version includes hospital based physicians and requires a system of uniform reporting and hospital financial information without any regulatory authority.

8. **Increased Authority for Advanced Nurse Practitioners** — The FMA is opposed to increased responsibilities for advanced nurse practitioners that would give them authority to perform medical

acts. A subcommittee of the House Regulatory Reform Committee has adopted language, in the rewrite of the Nurse Practice Act, that emasculates the current joint advisory committee and gives the State Board of Nursing responsibility for determination of the scope of duties for advanced nurse practitioners.

9. **Rewrite of the Medical Practice Act** — The House Committee on Regulatory Reform has jurisdiction for rewrite of the Medical Practice Act. As the proposed bill is now drafted, the major problem is the provision that allows any physician licensed in another state to get a Florida license without need to pass the Florida exam. The reciprocity language does not require graduation from an approved medical school.

10. **Other Late Developing Legislative Activities** — The Council would ask for permission to introduce to the Reference Committee any item of major significance that might have arisen in the Legislature between May 16 and the time of the FMA meeting.

The motion of the Reference Committee that Report F of the Board of Governors be filed as information carried.

## RESOLUTION 79-18
## Blood Banking
Capital Medical Society

The motion of the Reference Committee that Resolution 79-18 be adopted carried.

### RESOLUTION 79-18
### Blood Banking

RESOLVED, That we are opposed to HB 1305 which prohibits a non-replacement fee and may lead to inadequate blood supplies and be it further resolved that we are opposed to HB 1305 which makes the individual physician responsible for deciding if volunteer blood is available before using paid donor blood.

## Report H
## Board of Governors

The motion of the Reference Committee that Report H of the Board of Governors be adopted carried.

### Report H
### Board of Governors

**FMMJUA-PCF Board Separation** — The Board of Governors approved in principle separation of the FMMJUA-PCF Boards with adequate insured physician representation on the PCF Board.

## RESOLUTION 79-6
## Mandatory Pap Smear Law
Sarasota County Medical Society

The Reference Committee substituted a Resolution for 79-6. The motion of the Reference Committee that Substitute Resolution 79-6 be adopted carried.

### SUBSTITUTE RESOLUTION 79-6
### Mandatory Pap Smear Law

RESOLVED, That the Florida Medical Association continue its efforts to obtain repeal of Chapter 78-171.

RESOLVED, That the Florida Medical Association actively oppose any legislation that permits government intrusion into decision-making by physicians in providing patient care.

## RESOLUTION 79-17
## Unfair Unemployment Taxation
Clay County Medical Society

The motion of the Reference Committee carried that Resolution 79-17 not be adopted.

The Chairman expressed, on behalf of the Committee, their deep appreciation to Mrs. Jane Franklin, who performed so admirable as their recorder. He also thanked all members of the Florida Medical Association who appeared before the Committee. Special thanks was given to Dr. James Perry, Chairman of the Council on Legislation and Regulations, and to Dr. Joseph Von Thron, the AMA Delegate who served as an advisor. Dr. Coleman expressed his appreciation to all members of the Committee for their outstanding service.

The motion of the Reference Committee that the report of Reference Committee IV be adopted carried.

The Vice Speaker requested Dr. Hodes and Dr. Davenport to come to the podium to comment concerning some of the legislative posture. Dr. Hodes explained the methodology by which a decision is arrived at during the legislative session as far as the FMA is concerned. Dr. Davenport presented a legislative update.

The Second Meeting of the House of Delegates recessed at 5:30 p.m. to reconvene Sunday morning at 9:00 a.m.

# Third House of Delegates

The third meeting of the House of Delegates convened at 9:00 a.m. on Sunday, May 27, 1979, in Ballroom A of the Diplomat Hotel, Hollywood, Florida, with the Speaker of the House, Dr. Sanford A. Mullen, presiding.

Dr. Harold L. Williamson, Chairman of the Credentials Committee, reported 237 delegates were registered representing 35 county societies, which constituted a quorum, and moved that the delegates be seated. The motion carried.

### Delegates

ALACHUA — O. Frank Agee, M.D.; Thomas D. Bartley, M.D.; William T. Hawkins, M.D.; Douglas O. Jenkins, M.D.; Gerold L. Schiebler, M.D.; William C. Thomas, M.D.; Steve Westgate, Student Delegate; (Absent — James C. Garlington, M.D.)

BAY — Philip Cotton, M.D.; James D. Nixon, M.D.

BREVARD — Hani M. Agrama, M.D.; Richard N. Baney, M.D.; Brian P. Gibbons, M.D.; Juan A. Guerrero, M.D.; Howard W. Pettengill, M.D.; Robert J. Sarnowski, M.D.

BROWARD — Robert L. Andreae, M.D.; Leroy G. Appell, M.D.; Charles H. Bechert, II, M.D.; Robert L. Berger, M.D.; Anna M. Blenke, M.D.; Robert J. Brennan, M.D.; Andre S. Capi, M.D.; Phillip A. Caruso, M.D.; Ernest Constantino, M.D.; Burns A. Dobbins, M.D.; Arthur L. Eberly, M.D.; Kenneth H. Farrell, M.D.; Paul A. Flaten, M.D.; Stanley S. Goodman, M.D.; William C. Hartley, M.D.; Wilbur F. Helmus, M.D.; David C. Lane, M.D.; George P. Messenger, M.D.; Jerry D. Moore, M.D.; Ray E. Murphy, M.D.; Raymond E. Parks, M.D.; Thomas F. Regan, M.D.; David E. Taubel, M.D.; Peter A. Tomasello, M.D.; Anthony J. Vento, M.D.; Juan S.A. Wester, M.D.; (Absent — Bruce B. Burgess, M.D.; Russell B. Carson, M.D.; Willis N. Dickens, M.D.; William N. Glantz, M.D.)

CAPITAL — Robert P. Johnson, M.D.; Nelson H. Kraeft, M.D.; George N. Lewis, M.D.; Jack W. MacDonald, M.D.; Robert N. Webster, M.D.

CHARLOTTE — (Absent — Allen Baver, M.D.; T. Civitella, M.D.; Melvyn J. Katzen, M.D.)

CITRUS-HERNANDO — W. Randall Jenkins, M.D.; Samuel R. Miller, M.D.

CLAY — (Absent — Laurin G. Smith, M.D.)

COLLIER — Virgil A. Ponzoli Jr., M.D.; Donald Q. Vining, M.D.; Robert J. Wald, M.D.

COLUMBIA — (Absent — Henry E. Plenge, M.D.)

DADE — Edward R. Annis, M.D.; Jerome Benson, M.D.; Enrique Bermudez, M.D.; Robert L. Beshany, M.D.; Rufus K. Broadaway, M.D.; Manuel L. Carbonell, M.D.; Edmund Cava, M.D.; Richard C. Clay, M.D.; Jack Q. Cleveland, M.D.; Vincent P. Corso, M.D.; O. William Davenport, M.D.; Joseph H. Davis, M.D.; Charles A. Dunn, M.D.; Franklin J. Evans, M.D.; Miguel Figueroa, M.D.; George R. Gage, M.D.; Maurice M. Greenfield, M.D.; Julian H. Groff, M.D.; Joseph Harris, M.D.; James J. Hutson, M.D.; Walter C. Jones, III, M.D.; Robert B. Katims, M.D.; Norman M. Kenyon, M.D.; Carlos G. Llanes, M.D.; Robert L. Maury, M.D.; Charles Monnin, M.D.; Miguel A. Mora, M.D.; Joseph T. Ostroski, M.D.; Walter W. Sackett, M.D.; Oscar Sandoval, M.D.; Everett Shocket, M.D.; S. William Simon, M.D.; David Sims, M.D.; Margaret C.S. Skinner, M.D.; Mario Stone, M.D.; Charles F. Tate, M.D.; Thomas B. Turner, M.D.; Marco Villegas, M.D.; Raymond C. Walker, M.D.: Edgar W. Webb, M.D.; Edmund K. Zahn, M.D.; Sheldon Zane, M.D.; (Absent — Manuel Abella-Fernandez, M.D.; Herbert H. Davis, M.D.; Diego S. Falcon, M.D.; Abraham Gurinsky, M.D.; Marshall Hall, M.D.; James K. Johnson, M.D.; James R. Jude, M.D.; Herbert S. Kaiser, M.D.; Banning G. Lary, M.D:; Simon E. Markovich, M.D.; Ildefonso R. Mas, M.D.; Norman H. Pevsner, M.D.; Pedro A. Ramos, M.D.; Ronald Scherr, M.D.; Janice K. Sherwood, M.D.; Douglas Slavin, M.D.; Samuel P. Stokley, M.D.; William Straight, M.D.; John C. Turner, M.D.; Juan Valdes-Castillo, M.D.; Harold H. Weiner, M.D.; Steven M. Weissberg, M.D.; William Wickman, M.D.; Elliot Witkind, M.D.; Thomas J. Zaydon, M.D.; Shreve Archer, Student Delegate)

DESOTO-HARDEE-GLADES — Calvin W. Martin, M.D.

DUVAL — James L. Borland, M.D.; Yank D. Coble, M.D.; Clyde Collins, M.D.; Patricia C. Cowdery, M.D.; Wilbert L. Dawkins, M.D.; Richard C. Dever, M.D.; Charles P. Hayes Jr., M.D.; Walter G. Jarrell, M.D.; Benjamin A. Johnson, M.D.; John F. Lovejoy, Jr., M.D.; Charles B. McIntosh, M.D.; Walter E. Mingledorff, M.D.; John A. Rush, M.D.; Daniel B. Nunn, M.D.; Guy T. Selander, M.D.; Robert H. Threlkel, M.D.; William D. Walklett, M.D.; James W. Walker, M.D.; (Absent — Harvey E. Bernhardt, M.D.)

ESCAMBIA — Paul T. Baroco, M.D.; Eric F. Geiger, M.D.; Kenneth I. Holman, M.D.; Charles J. Kahn, M.D.; Robert K. Wilson, M.D.; Henry M. Yonge, M.D.; (Absent — Charles F. McConnell, M.D.)

FRANKLIN-GULF — Joseph P. Hendrix, M.D.

HIGHLANDS — Donald C. Hartwell, M.D.; (Absent — Glenn V. Hough, M.D.)

HILLSBOROUGH — Richard A. Bagby, M.D.; Louis E. Cimino, M.D.; Francis C. Coleman, M.D.; Richard G. Connar, M.D.; Irving M. Essrig, M.D.; John C. Fletcher, M.D.; Richard S. Hodes, M.D.; Victor H. Knight Jr., M.D.; Thomas E. McKell, M.D.; Edward Pedrero, M.D.; John K. Petrakis, M.D.; Ralph E. Rydell, M.D.; Ronald L. Seeley, M.D.; Ralph M. Stephan, M.D.; William W. Trice, M.D.; Harold L. Williamson, M.D.; Woody N. York, M.D.; John A. Baker, Student Delegate.

INDIAN RIVER — Donald L. Ames, M.D.; Ferdinand F. Becker, M.D.

LAKE — Frederick C. Andrews, M.D.; James M. Hardy, M.D.; Robert H. Hux, M.D.

LEE — Cecil C. Beehler, M.D.; Larry P. Garrett, M.D.; H. Quillian Jones Jr., M.D.; Marcus M. Moore, M.D.; (Absent — John S. Hagen, M.D.; Michael J. Murray, M.D.)

MADISON — (Absent — Adolfo G. Dulay, M.D.)

MANATEE — Robeart E. Blackwood, M.D.; Thomas R. Busard, M.D.; Sanford Elton, M.D.; Keith J. Lassen, M.D.

MARION — C. Brooks Henderson, M.D.; Samuel L. Renfroe, M.D.

MARTIN — Fred S. Carter, M.D.; William A. Hewson, M.D.

MONROE — Ronald H. Chase, M.D.; Robert D. Carraway, M.D.

NASSAU — (Absent — Jose L. Castillo, M.D.)

OKALOOSA — David R. Arrowsmith, M.D.; Eugene R. Valentine, M.D.

ORANGE — Clarence C. Bailey, M.D.; Clifford D. Bidwell, M.D.; Clarence H. Brown, III, M.D.; Francis M. Coy, M.D.; Clarence M. Gilbert, M.D.; Alberto J. Herran, M.D.; Wm. Edward Hoffmeister, M.D.; David L. Mackey, M.D.; Joseph G. Matthews, M.D.;

Franklin B. McKechnie, M.D.; Hector Mendez, M.D.; J.D. Moore, M.D.; James F. Richards Jr., M.D.; Edward W. Stoner, M.D.; T. Byron Thames, M.D.; Robert B. Trumbo, M.D.

OSCEOLA — George A. Gant, M.D.

PALM BEACH — Vernon B. Astler, M.D.; Richard C. Cavanagh, M.D.; John D. Corbitt Jr., M.D.; Lee A. Fischer, M.D.; J. Russell Forlaw, M.D.; Luis R. Guerrero, M.D.; James T. Howell, M.D.; V.A. Marks, M.D.; Charles E. Metzger, M.D.; Benjamin Moore, M.D.; Roger D. Petersen, M.D.; Reginald J. Stambaugh, M.D.; Ben R. Thebaut Jr., M.D.; Arthur L. Trask, M.D.; Dick L. Van Eldik, M.D.

PANHANDLE — Herbert E. Brooks, M.D.; James T. Cook Jr., M.D.

PASCO — Nessan McCann, M.D.; (Absent — Morris L. Saperstein, M.D.)

PINELLAS — William W. Atkinson, M.D.; Thomas M. Daniel, M.D.; Robert L. Dawson, M.D.; Michael H. Diamond, M.D.; Charles K. Donegan, M.D.; Irwin L. Entel, M.D.; Kay Knight Hanley, M.D.; David S. Hubbell, M.D.; Morris J. LeVine, M.D.; Donald I. MacDonald, M.D.; Jack A. MaCris, M.D.; Frank I. Mendelblatt, M.D.; J.H. Miller, M.D.; Donald G. Nikolaus, M.D.; Rex Orr, M.D.; John P. Scheuren, M.D.; Frederick O. Smith, M.D.; (Absent — David T. Overbey, M.D.)

POLK — Salvadore J. Barranco, M.D.; Frank J. Fischer, M.D.; John W. Glotfelty, M.D.; Paul A. Tanner Jr., M.D.; (Absent — Thomas M. Caswall, M.D.; Allan Erde, M.D.; Clyde E. Gibson, M.D.; Stanley W. Lipinski, M.D.)

PUTNAM — Roy E. Campbell, M.D.

ST. LUCIE-OKEECHOBEE — William H. Meyer Jr., M.D.; Bruce E. Mills, M.D.

SANTA ROSA — (Absent — William N. Watson, M.D.)

SARASOTA — John N. Carlson, M.D.; Lee S. Harris, M.D.; Samuel E. Kaplan, M.D.; Kenneth C. Kiehl, M.D.; Martin F. Mihm, M.D.; Franklin Pfeiffenberger, M.D.; Richard C. Rehmeyer, M.D.; Karl R. Rolls, M.D.

SEMINOLE — Luis M. Perez, M.D.; Frederick J. Weigand, M.D.

SUWANEE-HAMILTON-LAFAYETTE — (Absent — Hugo F. Sotolongo, M.D.)

TAYLOR — John A. Dyal, M.D.

VOLUSIA — William R. Jones, M.D.; Frank J. Lill, M.D.; Alvin E. Smith, M.D.; Richard W. Snodgrass, M.D.; Charles A. Stump, M.D.; James G. White, M.D.

WALTON — (Absent — Howard F. Currie, M.D.)

WASHINGTON — (Absent — John T. Grace, M.D.)

SPEAKER OF THE HOUSE — Sanford A. Mullen, M.D.

VICE SPEAKER — James B. Perry, M.D.

## Installation of the President

Dr. Mullen recognized the President, Dr. O. William Davenport, and asked that he come forward to install the new president. Dr. Davenport expressed his appreciation at having had the opportunity to serve the Association as President. He noted it was with great pleasure that he turn the office over to Dr. Hodes, a distinguished scholar, Congressman and physician.

Dr. Davenport presented the personal gavel and President's certificate to Dr. Hodes, the new president.

Dr. Hodes presented Dr. Davenport with the Past President's pin and asked Dr. Norman Kenyon and Dr. Walter Jones to escort Mrs. Carolyn Davenport to the platform, where he presented her with Dr. Davenport's portrait.

Dr. Hodes noted that those attending the meeting and those following the legislative activities recognize the ongoing problems that all physicians have in doing their jobs as physicians to maintain the status and relationships with their patients. He stated that not only do physicians have a responsibility to themselves, but to over nine million Floridians to see to it that their health and safety is protected in spite of the lack of understanding and the lack of perception of what the true goal of medicine is — that is, the life and health of people. He flet that there was a need to develop direction each year and that his goal this year would be to make certain that finances are not a barrier to securing health care. Dr. Hodes noted many reasons for the high cost of medical care, and as President called upon all physicians to point out where the costs are and to speak out loudly and strongly in the press and electronic media to be sure that Floridians know why health care is so expensive. He asked that physicians point out who is making the cost of health care a commodity which is out of the reach of a growing number of Floridians. Dr. Hodes stated this would be the thrust and goal of the Association for the coming year.

Dr. Hodes stated he would like to follow up Dr. Davenport's Nutrition Program with a program on Physical Fitness that will answer the many questions that are prevalent today. He also stated that a management study of the FMA had been done during the past few months, and changes in committee structure, staff, etc., will be forthcoming.

Dr. Hodes thanked the Association for their support and endorsement and said he looks forward to the coming year. He introduced his wife, Margie, and his sister-in-law, Frances.

Dr. Davenport expressed his gratitude to his wife Carolyn for her support during the past year and introduced his son, William.

Dr. Mullen, Speaker, requested Dr. Schiebler, Editor of the *Journal*, to escort Louise Rader, Managing Editor of the *Journal*, to the podium for recognition of her 25 years of service to the FMA. Dr. Parham, Executive Vice President, presented Mrs. Rader with a check and expressed the gratitude of the Association for her many years of work.

The Speaker resumed the Chair and called for the report of Reference Committee No. III.

**Outgoing President O. William Davenport, M.D., (right in upper left picture) congratulates his successor, Richard S. Hodes, M.D., of Tampa. Dr. Hodes addresses the House of Delegates (upper right), after which Dr. Davenport leads the applause (lower left). Dr. Hodes presents Dr. Davenport with his Past President's pin. (lower right).**

# Report of Reference Committee No. III Finance and Administration

Dr. Richard B. Moore, Chairman, and his committee came forward to present the report of Reference Committee No. III, Finance and Administration.

The Reference Committee considered the remarks of the Speaker of the House of Delegates, Dr. Sanford A. Mullen, and his clear and concise reminder of the duties as delegates and the rules under which the House of Delegates acts, and commended him for his excellent performance as Speaker and for his summary at the beginning of the meeting.

The motion of the Reference Committee that the remarks of the Speaker be filed as presented carried.

The Reference Committee considered the President's Address and noted that it constituted a new horizon in audio-visual use at the House of Delegates with an international flavor heretofore unseen and commended the President on his presentation and his service to the Association.

The motion of the Reference Committee that the President's Address be filed as presented carried.

## Report A of the Board of Governors

Motions of the Reference Committee that Recommendation A-1 through A-10 be adopted carried.

## Report A of the Board of Governors

O. William Davenport, M.D., Chairman

Your chairman is pleased to submit this report to the House of Delegates regarding the activities of your Board of Governors during the past year, and also those activities of the Association's Councils and Committees.

Your Board and the many physicians who have given freely of their time in behalf of the Association, have exercised every effort to insure the highest level of medical care for the citizens of Florida and the preservation of the free enterprise system of health care delivery.

This report reflects the Association's programs and activities in pursuit of these goals and the many crucial issues which continue to face physicians individually and collectively.

Your chairman is grateful for having had the opportunity of serving this fine organization during the past year and it has been a particular pleasure to work with the high caliber of physicians who have served on the Board. Each of them have represented their fellow physicians unselfishly and to the best of their ability:

Vernon B. Astler, M.D.
Rufus K. Broadaway, M.D.
Benjamin M. Cole, M.D.
J. Lee Dockery, M.D.
J. Russell Forlaw, M.D.
Richard S. Hodes, M.D.
Charles J. Kahn, M.D.
Norman Kenyon , M.D.
Jack A. MaCris, M.D.
Joseph G. Matthews, M.D.
Sanford A. Mullen, M.D.
Louis C. Murray, M.D.
Donald G. Nikolaus, M.D.
Eugene G. Peek Jr., M.D.
Thomas B. Thames, M.D.
William W. Thompson, M.D.
Robert E. Windom, M.D.

To my successor, Dr. Dick Hodes, I extend my best wishes for the same rewarding experience that I have enjoyed in serving the FMA and I extend to Dr. Hodes my fullest support in facing the crucial issues that affect all physicians.

Reference Committee III (Finance and Administration) was chaired by Richard B. Moore, M.D., of West Palm Beach (standing). Others pictured (left to right): AMA Delegate Advisor Vincent P. Corso, M.D., Miami; Julian H. Groff, M.D., North Miami Beach; Victor H. Knight, M.D., Tampa; Samuel M. Day, M.D., AMA Delegate Advisor, Jacksonville; Calvin W. Martin, M.D., Arcadia; and Ms. Willene Thompson, Jacksonville, Recorder.

### Major Activities

**1979 Annual Meeting** — The Board approved the format for the 1979 Annual Meeting with "Nutrition" as its theme. Drs. Henry Yonge, Calvin Martin and Maurice Laszlo were commended for the continuing excellence of the scientific program and noted that physicians would be able to earn up to 20 hours of mandatory CME credit. The Board also commended Dr. Yank Coble, Chairman, and the other members of the Ad Hoc Committee on Nutrition for their efforts in developing a special Symposium on Nutrition to be held in conjunction with the scientific program.

**Financial Statement and Budget** — The Board reviewed the financial report prepared by the Executive Vice President and approved the auditors' statement presented by the Treasurer prepared by Lucas, Herndon, Hyers & Pennywitt. These reports covered the calendar year 1978 and showed the Association's regular income from all sources was $2,231,821, and total expenses during the year were $1,867,899, for a net income of $363,922. These figures do not include funds expended for equipment or depreciable items as these are a transfer of assets from liquid to fixed. Funds received from the Special Assessment for Public Relations and Legislation in 1976 and 1977 totaled $876,100 and as of December 31, 1978, had a balance of $194,027. The total assets of the Association as of December 31, 1978, was $2,662,915, less liabilities of $645,023, for net assets of $2,017,892.

The House of Delegates increased the dues of the Association effective January 1, 1978, for active members from $125 to $175 per year and designated $50 ". . . to be earmarked for public relations and legislative educational activities." The Board approved a budget for 1979 totaling $2,004,000 which is the total anticipated income from all sources. In compliance with the Bylaws, this budget was prepared by the Executive Vice President in consultation with the Treasurer. It was then carefully reviewed by the Executive Committee which also serves as the Finance Committee, and finally reviewed and approved by the Board of Governors.

**Florida Physicians Insurance Reciprocal and PIMCO** — Your chairman's President's Page in the December 1978 issue of the *Florida Medical Association Journal* addressed the current status of the FPIR and advised insureds (over one half of the FMA members) of a rate reduction and dividends for 1979 PLI premiums which included 7.35% reduction for most subscribers and an approximate 4% dividend for 1978. A consolidated report is included in the Delegates' Packets for information.

The Professional Insurance Management Company (PIMCO) was established by the FMA and through contract provides management and underwriting functions for the Reciprocal and also administers the other FMA sponsored insurance plans. An informational brochure on PIMCO and the insurance plans sponsored by the Association is included in the Delegates' Packets.

**FMA Leadership Conference** — There was no interim or called meeting of the House of Delegates during the past year. However, the Board re-instituted the FMA Leadership Conference for county medical society officers.

The Conference was held January 27-28, 1979, at the Orlando Hyatt House. The Conference drew a record attendance of 139 persons and was the first since 1975. Some observers believed it was one of the most successful conferences of its kind the FMA has ever sponsored.

Those in attendance at the sessions in the Orlando Hyatt House on January 27-28 represented 34 county medical societies and 98 percent of the total FMA membership.

The program included discussions on issues of major concern to all physicians:

- FMA Priorities, 1978-79 — A summary of the status of FMA priorities for 1978-79, including liaison and communications with the membership, county societies and specialty groups; medical service programs; public relations; HSA activities; and relationships with government agencies. Major issues include national health insurance; separate Department of Health; and government intervention into the practice of medicine.
- Cost of Medical Care — The background of the development of the National Voluntary Effort, and what it is, as well as the development of our state committee and activity in Florida. Statistics were presented to demonstrate the result of the voluntary effort.
- Legislative Overview — Accomplishments of the FMA in the Legislative arena during the past three years and challenges for the future.
- HSA — An update on what the FMA Committee is doing to monitor health planning in Florida.
- PSRO — Status in Florida — A brief history of PSRO and the development in Florida. Slides showed the PSRO areas in the state and the status of PSRO. The presentation covered the State PSRO Council and its function, alternate PSRO's and the federal laws, regulations, and criteria for alternate PSRO's.
- The Impaired Phyician — An overview of Impaired Physician Programs in other states and the potential for a formal Impaired Physician Program involving county medical societies and the appropriate committees of the FMA; in addition the "Sick Doctor Act" was reviewed.
- AMA — A review of the activities of Florida's AMA delegation, with special emphasis on national health insurance.
- Professional Advertising — Included was a discussion of the recent Federal Court cases involving professional advertising and the recent action by the Federal Trade Commission involving the AMA's Code of Ethics; recent developments on the state level regarding the actions by the State Board of Medical Examiners and rules that have been promulgated relative to physician advertising; and the impact that these judicial and regulatory agency decisions have had on Association policy.
- Public Relations — A review of FMA's past and proposed public relations activities.
- Scientific Programs — A review of all current major programs of the Council on Scientific Activities — continuing medical education and accreditation activities, *The Journal of the FMA*, the scientific speaker registry, and the CME co-sponsorship activities of the Florida Medical Foundation.
- Government Investigations — A summary of the status of governmental investigations involving the association, including those by the Federal Trade Commission, Federal Elections Commission, Justice Department, U.S. Postal Service and the Internal Revenue Service.
- FLAMPAC Educational Program — The present FLAMPAC organization and functions, and review of projected 1979 activities emphasizing membership and political education.
- National Legislation — Overview of accomplishments and issues during the last session of the Congress with emphasis on the task for Florida physicians in 1979.
- State Legislative Programs — Responsibilities of key contact physicians and a summary of 1979 legislative program.
- County Medical Society Programs and Problems — Presented by Dade County Medical Association, Walter C. Jones, M.D., President; Escambia County Medical Society, Robert K. Wilson Jr., M.D., President; and Volusia County Medical Society, Frank J. Lill, M.D., President..t

A complete summary of the Conference was printed in the March 1979 issue of the *FMA Journal*.

### 1978 House of Delegates Referrals

The 1978 Proceedings of the House of Delegates were reviewed

and items requiring additional study and action were referred to the appropriate Councils and Committees. Some matters required Board action only. Individual actions regarding the policies of the House of Delegates appear in the various Council and Committee reports as well as in this and other reports of the Board.

**Resolution 78-9 — SBME Deputies** — This resolution introduced by the Palm Beach County Medical Society was not adopted but referred to the Board of Governors.

The "Resolveds" called for the Florida Board of Medical Examiners pursuant to the authority granted to it in Section 458.201(2)(c) Florida Statutes, to deputize those physicians who are the members of each local Florida medical society's disciplinary committee to act for the Board of Medical Examiners for investigation and/or adjudicating the conduct or competence of physicians practicing in each local society's jurisdiction; provided, however, that the local disciplinary committee first comply with the requirements established by the Board of Medical Examiners for such committees and the local society apply to have its disciplinary committee so designated by the Board; and further, that the Board of Medical Examiners establish uniform standards and procedures for the (Deputization) and actions of such local disciplinary committees that desire to be designated as such agents of the Board.

The FMA Judicial Council considered the issues raised by the resolution and noted that the Council had submitted recommendations to the Board of Governors that would accomplish the intent of the resolution. The actions of the Board on recommendations submitted by the Special Ad Hoc Committee on the State Board of Medical Examiners and the Judicial Council to strengthen the SBME, including deputization of physicians to assist the Board in its investigations, is included in the Delegates handbook.

## RECOMMENDATION NO. A-1

**THAT RESOLUTION 78-9, STATE BOARD OF MEDICAL EXAMINERS DEPUTIES, BE ADOPTED.**

**Resolution 78-8, Public Relations Pamphlet** — This resolution introduced by the Brevard County Medical Society was not adopted but referred to the Board of Governors. The resolve of the resolution called for the FMA to compose a pamphlet explaining the facts concerning the increase in the cost of medical care and that these pamphlets be made available to members of the FMA.

The general subject of the cost of medical care has been addressed by the Board of Governors in adoption of a position statement on the cost of medical care and by the Council on Medical Economics, and also by the Florida Committee on the Cost of Medical Care, which is a cooperative effort between the Florida Medical Association, the Florida Hospital Association, Blue Cross of Florida, Blue Shield of Florida, Florida League of Hospitals, Health Insurance Council of Florida, and the Florida Osteopathic Medical Association, to determine the factors affecting increasing health care costs and to take appropriate actions within the individual sectors.

The Board has authorized publication of a brochure to be made available to FMA members which explains the impact of inflation, government regulations, and other influences on the rising cost of medical care over which physicians have no control. In addition, the Board has authorized publication of a brochure to be used in conjunction with the public service announcements being prepared by the Florida Committee on the Cost of Medical Care which will accent life styles. The Board feels that these and other actions of the Board relating to the cost of medical care comply with the intent of the resolution.

## RECOMMENDATION NO. A-2

**THAT RESOLUTION 78-8, PUBLIC RELATIONS PAMPHLET, BE ADOPTED.**

## APPOINTMENTS

**Appointments** — The Board of Governors approved the nomination of Rufus K. Broadaway, M.D., as the AMA Delegate to serve on the Board of Governors. Thomas B. Thames, M.D., was appointed as optional member of the Executive Committee.

Appointed as advisory members of the Board of Governors were Eugene G. Peek Jr., M.D., Department of Health and Rehabilitative Services; Joseph G. Matthews, M.D., Blue Shield of Florida, Inc.; Benjamin M. Cole, M.D., Florida State Board of Medical Examiners; and Sanford A. Mullen, M.D., Speaker of the House of Delegates. Vernon B. Astler, M.D., was designated as Public Relations Officer and Joseph C. Von Thron, M.D., was designated as the Board's representative to FLAMPAC.

Gerold L. Schiebler, M.D., was reappointed to serve as Editor of the *Journal of the Florida Medical Association* for 1979-80. William M. Straight, M.D., was appointed FMA Historian and Historical Editor of *The Journal*, and Norman M. Kenyon, M.D., was designated as the Board of Governors' representative on the Committee on Scientific Publications.

Appointed as chairman of standing committees of the Board were: *Committee on Allied Health Professions*, — Luis M. Perez, M.D.; *Committee on Voluntary Health Agencies* — Robert C. Palmer Jr., M.D.; and *Committee on County Medical Societies* — Joseph P. Hendrix, M.D.

Appointed as chairmen of special committees were: *Committee on Cost of Medical Care* — James F. Richards Jr., M.D.; *Ad Hoc Committee on Nutrition* — Yank D. Coble Jr., M.D.; and *Ad Hoc Committee on Blue Shield* — Charles J. Kahn, M.D.

James T. Cook Jr., M.D., and Joseph C. Von Thron, M.D., were elected Chairman and Vice Chairman respectively of the Committee on AMA House of Delegates.

## AWARDS

**A. H. Robins Award** — The Board reviewed nominations received from county medical societies and selected the recipient of the A.H. Robins Award "For Outstanding Community Service by a Physician". This award will be presented at the First Meeting of the House of Delegates on May 23, 1979. The recipient for this year's award will be included in the Delegates' Packets.

**Distinguished Layman Award** — The Board has selected the 1979 recipient of the Distinguished Layman Award. The appropriate citation, along with the criteria, is included in the Delegates' Packets.

## NOMINATIONS

**Certificate of Merit** — The Board selected an outstanding physician for nomination to the House of Delegates to receive the Certificate of Merit for 1979 (the Association's highest honor of achievement). This nomination will be included in the Delegates' Packets for approval by the House of Delegates.

**Judicial Council** — In compliance with the FMA Bylaws, the Board of Governors has considered nominations for terms expiring on the Judicial Council in 1979. The Board nominates O. Frank Agee, M.D., to the House of Delegates for election to the Judicial Council as the representative from District A for a one-year term and James A.

Winslow, M.D., as the representative from District B for a five-year term.

**Committee on Membership and Discipline** — In compliance with the Bylaws, the Board has reviewed terms expiring in 1979 on the Committee on Membership and Discipline. Nominations from county medical societies have been considered, and the Board nominates the following physicians for election to the Committee on Membership and Discipline for the terms indicated. (See Elections, page , for members elected.)

**Blue Shield Board of Directors** — The Board selected nominees for election to the Blue Shield Board of Directors from a list of names submitted by the Blue Shield Nominating Committee. Nominees for each physician seat were selected as follows:

Med. Dist. "B" Irving Essrig, M.D., Tampa (incumbent)
Lloyd Pendergrass, M.D., Tarpon Springs

Med. Dist. "D" John T. Kilpatrick, M.D., Coral Gables
Banning G. Lary, M.D., Miami

At Large (three vacancies — three-year terms)

1. Clarence M. Gilbert, M.D., Orlando
   B. Philip Cotton, M.D., Panama City
2. Frederick O. Smith, M.D., Dunedin
   Edward R. Westmark, M.D., Pensacola
3. Michael J. Foley, M.D., Melbourne
   John D. Corbitt Jr., M.D., Lake Worth

Laymen
Med. Dist. "D" (three-year term)
Leon D. Black Jr., Miami

At Large (two vacancies — three-year terms)

1. Lewis A. Forman Jr., Pensacola (incumbent)
2. Wallace E. Mathes Jr., Sarasota (incumbent)

Hospital Admin./Blue Cross Board Member (one-year term)
Middleton T. Mustian, Tallahassee

### Board Actions of Major Importance

**FMA Priorities 1978-1979** — The Board adopted the following Association priorities for 1978-79 and directed that Association staff and resources be utilized carrying out these priorities. As provided in the Bylaws, $50.00 per member for all FMA active dues paying members has been designated for public relations and legislative educational activities.

**Membership:**

Intensify communication with the FMA membership, improve liaison and communications with county medical societies and specialty groups.

Establishment of working relationship and improved communications with physicians in training.

Continued strengthening of all aspects of the Continuing Medical Education program with special programs on nutrition and accreditation activities.

**Public:**

Continued implementation of FMA medical services program with special emphasis on a nutritional program, preventive medicine, emergency medical services, and rural health.

Continued efforts to implement the activities of the Florida Committee on the Cost of Medical Care in its study of the factors affecting the rise in the cost of medical services, and advising the public regarding the contributing factors.

**Programs:**

Further implementation of FMA Public Relations program with the news media and the general public.

Continued emphasis on local support for legislative activities and development of a political educational program in each community.

Increased efforts toward implementation of an effective program of evaluation and input into government programs with special emphasis on PL 93-641 National Health Planning and Development Act (HSA and the State Health Coordinating Council and administering agencies of government).

Continued review and efforts to update third party reimbursement, specifically the Workmen's Compensation medical and surgical schedule, and the Department of HRS Medical Schedule.

Continued efforts to establish a statewide voluntary Professional Review Organization (PRO) without federal government control and to include the private sector (which encompasses Peer Medical Utilization Review).

**Issues:**

Separate Department of Health
National Health Insurance
Government interference in the practice of medicine
Role of allied health professions and ancillary personnel in the delivery of health care.

Efforts to increase communications between the FMA and county medical societies has been continued through the FMA branch offices in Tallahassee, Tampa, and Miami. These efforts have resulted in closer liaison between county medical societies and the FMA.

Communications have been improved with physicians in training, and a solid working relationship now exists. Interns and residents are now active in the Association, and are participating in AMA activities. Medical students are also becoming increasingly active in county medical society activities, and some are serving as delegates to the FMA.

The continuing medical education program has been strengthened through offerings of course programs on nutrition. This will continue through the Annual Meeting.

Public awareness of FMA concerns has been accomplished through several areas. Implementation of the FMA Medical Services Program continues with special emphasis on Preventive Medicine, Rural Health and Emergency Medical Services. Physician recruitment continues to be of great interest, and a Third Physician Recruitment Conference was held in Tampa in January.

Efforts continue toward the implementation of voluntary cost containment measures through FMA's representation on the Florida Committee on the Cost of Medical Care. The committee has developed a public awareness campaign as well as programs for physicians on cost containment. Additionally, the FMA Speaker's Bureau has been invaluable as the voice of organized medicine in Florida.

In the category of special programs, the February edition of *The Journal of the Florida Medical Association* offered a detailed summary of the many programs and activities being conducted by the FMA, and in April there was a special *Journal* issue on nutrition which contained 28 articles on nutritional evaluation and nutritional diseases.

Local support for legislative activities continues to be both a goal and a priority. By appearing before the Florida Legislature and Congress when issues develop which are of importance to medicine, the position of organized medicine is becoming known.

Efforts are continuing in the area of activity within government programs such as HSA's and PSRO's. In areas such as these the presence of doctors enables medicine to gain ground rather than losing everything.

The FMA continues to review and make efforts to update third party reimbursements such as workmen's compensation and others.

Efforts are continuing in an attempt to establish a State Professional Review Organization as a voluntary program. It is hoped that when this State PRO becomes a reality it can work with industry and business to provide peer review for the medical services and care received by employees.

The Florida Health Data Corporation is well underway and provides a mechanism to maintain confidentiality of medical records for physicians.

An attempt to mandate a separate Department of Health through Constitutional revision was unsuccessful in 1978, but efforts continue to bring about reestablishment of a viable state public health program headed by a physician with direct line authority.

In the area of National Health Insurance, the American Medical Association House of Delegates has overwhelmingly adopted a proposal introduced by the Florida Delegates which calls for modifications in our current health care system in lieu of compulsory comprehensive national health insurance.

Additional activities in carrying out the priorities of the Association are reflected throughout the Board's report and in the activities of the Association's Councils and Committees.

**Emergency Resolution** — Requested Florida's AMA delegates to submit the emergency resolution adopted by the FMA House of Delegates to the AMA for consideration at the annual meeting in St. Louis, regarding the attack on the AMA and physicians by the President of the United States; and directed that a telegram be sent immediately to the President of the United States transmitting the emergency resolution adopted by the FMA House of Delegates, and that copies of this telegram be sent to both U.S. Senators and Florida's Congressional Delegation.

This resolution resolved that the House of Delegates of the Florida Medical Association go on record as respectfully repudiating the unjustified attack by the President of the United States on the American Medical Association and the physicians, patient care and advancement of medical science which it represents.

As indicated in the annual report of the AMA Delegates, this resolution was introduced and adopted by the AMA House of Delegates at its meeting in June.

The telegram transmitting the resolution to the President was acknowledged by a White House Aide in behalf of the President, thanking the Association for its comments.

**House of Delegates Ratio** — Voted to make no change for 1979 in the current ratio for the House of Delegates of one delegate to every forty active members of component county medical societies.

**Annual Meeting Dates** — Confirmed on a definite basis proposed future annual meeting dates through 1986, and re-affirmed the previous action that all future meetings be held at the Diplomat Hotel until such time as a suitable alternate location becomes available.

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|---|---|
| May 23-27, 1979 | May 4-8, 1983 |
| May 7-11, 1980 | May 9-13, 1984 |
| April 29-May 3, 1981 | May 1-5, 1985 |
| May 5-9, 1982 | May 7-11, 1986 |

**Mediation Panels** — Stressed the need for individual responsibility by physicians in participating on local mediation panels to insure that the intent of this law is properly carried out.

**FMA Auxiliary** — Commended the FMA Auxiliary for its efforts on behalf of the medical profession and approved the proposed activities and programs of the Auxiliary for 1978-1979, the theme of which was "The Year of Awareness", including breast self-examination, cardiopulmonary resuscitation and child abuse.

The Board requested the Auxiliary to assist in a program of physical awareness and child abuse reporting, and enlisted the Auxiliary's support in the areas of legislation and public relations.

**FMA Travel** — Reaffirmed current FMA policy not to sponsor medical trips to communist countries.

**Litigation** — Received a report regarding the status of litigation and investigations the Association has been subjected to during the past year by seven federal government agencies.

There are currently 35 separate independent agencies and organizations within the Executive Department of our federal government administering a vast array of federal regulations of business in our nation. There is no question about it being a growth industry. Current regulatory expenditures are over six times the 1970 level. The Center for Study of American Business at Washington University in St. Louis estimates the current administrative cost at $3.2 billion. These costs and expenditures do not include activities such as Internal Revenue Audit Division, Postal Authorities, Federal Bureau of Investigation, etc., or the voluminous congressional investigations.

Your Florida Medical Association and its related activities have certainly had its share of federal abuse this past year.

1. **Justice Department Anti-Trust vs. Florida Medical Association**

   The Florida Medical Association received civil investigative subpoenaes from the Anti-Trust Division of the U.S. Department of Justice alleging activities in violation of the Sherman Anti-Trust Law, specifically as it pertained to health maintenance organization activities. All documents requested were produced, briefs submitted and conferences held with investigative attorneys. The investigation is still open. To the best of our knowledge, there has been no violation of federal laws or regulations by the Florida Medical Association.

2. **Federal Trade Commission vs. Florida Medical Association**

   This is an investigation of the FMA for allegedly restraining trade in Florida. This is a similar investigation to the Justice Department's pertaining to HMO activities. The FMA had violated no laws or regulations and, after the time and expense involved, the Trade Commission has dismissed the complaint and discontinued further investigation.

3. **Federal Elections Commission vs. FLAMPAC**

   This investigation is currently pending in the federal courts "in camera" which means it can not be discussed. To our knowledge, there has been no violation of the election law and this investigation has cost a small fortune.

4. **FTC Investigation of Restraint of Trade Due to FMA's Relationship with Blue Shield of Florida, Inc.**

   This is an ongoing investigation which involved FMA producing all of its records and documents, correspondence, newsletters, etc., dating back to 1944.

5. **U.S. Postal Department**

   The U.S. Postal Department advised the Florida Medical Association that it was revoking its third class postal permit which had been held in excess of twenty-six years. This decision was made by the postal service in Washington and the

dictate given to the Postmaster in Jacksonville. (It was interesting to note that they excluded the Florida Bar as it was an educational institution.) Adequate documents, etc., were submitted to the local Postmaster to justify the continuance of the postal permit; however, he is not being allowed to make this decision. It is currently on appeal in Washington. The appropriate documents from the federal government will be requested under the Freedom of Information Act to attempt to ascertain who initiated this harassment.

6. **Internal Revenue Service**

The IRS has been conducting an intensive investigation of our activities for 1976 to ascertain if there is any tax liability and whether or not to continue our 501(c)(6) tax exempt status. It was the original intent of IRS to review all of our organizations such as the Foundation, FLAMPAC, PIMCO, etc., but this has been minimal. A special review has been made of our legislative activities. The investigation and audit is still in process.

7. **IRS Investigation — Florida Medical Foundation**

The Internal Revenue alleged that the Florida Medical Foundation Trust (incidentally, a corporate entity which does not exist) had not filed a tax return nor applied for a tax-exempt status. This investigation reached the harassment state and is now in inactive open status which will probably end up in the courts. Again, no violation of any federal law or regulation.

The FMA is actively pursuing:

1. Assisting physicians in countersuits for unwarranted malpractice suits against them (11 in litigation).
2. Preventing the federal government from publishing alleged amounts of payments to Medicare beneficiaries and physicians (Pending Court of Appeals, Fifth District, New Orleans, Louisiana).
3. Opposing litigation to set aside mediation panels.

The Executive Vice President was directed to document as accurately as possible all actions of government interference with the practice of medicine in Florida.

**AMA Dues Collection Reimbursement** — Authorized sharing with county medical societies reimbursements received from the AMA for collection of AMA dues on a 50% pro rata basis.

**FMA Medical Defense Fund** — Reiterated the purpose and criteria for the FMA Medical Defense Fund.

"**Medical Defense Fund** — A Medical Defense Fund is established by the Florida Medical Association for the defense of the good name of the medical profession and may be utilized through individual members of the Association willing to assist in defending the good name of the medical profession, provided the individual has the endorsement of his county medical society and is willing to return from the proceeds of any recovery the amount expended by the Association, said return being allocated to the Medical Defense Funds. In no event shall Medical Defense Funds be utilized to the inurement of individual Association members."

**International Cuban Medical Association** — Approved FMA co-sponsorship of the Fifth Annual Cuban Medical Association Congress to be held at the Americana Hotel, Bal Harbour, Florida, July 3-7, 1979.

**FMA Co-sponsorship of AMA Seminars** — Approved FMA co-sponsorship of two AMA Seminars in 1979: Medical Staff Leadership, February 9-10, 1979, Doral Country Club and Hotel, Miami; and Patients Safety/Risk Control Seminar, November 9-10, 1979, at the Breakers Hotel, Palm Beach.

**Excellence in Medical Journalism** — Approved continuance of the FMA Award for Excellence in Medical Journalism to be presented at the 1979 FMA Annual Meeting for excellence in the field of medical reporting.

**Florida Orthopedic Society Resolution** — Enthusiastically endorsed the resolution of the Florida Orthopedic Society commending Doctor James Richards of Orlando for his efforts devoted to the improvement in relations with the Florida Industrial Commission and its various components and for helping to bring about adoption of the five-digit code.

**JUA Board of Directors** — Reaffirmed the appointment of James W. Walker, M.D., Jacksonville, as the FMA representative to the Florida Medical Joint Underwriting Association and the Patients Compensation Fund Board of Directors.

The Board has been advised of a question posed by Mr. Doug Mang, General Counsel to the Insurance Commissioner, regarding a possible conflict of interest relative to Dr. Walker's appointment to the Florida Medical Joint Underwriting Association and the Patients Compensation Fund Board of Directors. The Insurance Commissioner was advised that the Florida Medical Association selects the most qualified physicians available when making nominations and appointments and that this was certainly true in Dr. Walker's appointment.

**Organization for Medical Electronic Data Processing Services** — The Board of Governors reviewed a proposal culminating over 10 years of study into the development of an organization within the private medical sector of an electronic data processing system to aid physicians in improving the quality, availability and economy of medical care and to relieve the physician from the overwhelming volume of paper work in their offices. Not only would such a system be of great potential benefit to Florida physicians, it would also enhance many of the programs and activities of the FMA and the Florida Medical Foundation, and also the Florida Health Data Corporation.

### RECOMMENDATION NO. A-3

**THAT THE FMA APPROVE IN PRINCIPLE THE DEVELOPMENT THROUGH AN APPROPRIATE FMA-SPONSORED ORGANIZATION OF AN ELECTRONIC DATA PROCESSING SERVICE OF HIGH QUALITY AT A REASONABLE COST TO MEMBERS OF THE FMA, SUBJECT TO AN APPROPRIATE FEASIBILITY STUDY.**

**Reciprocal Life Program** — The Board of Governors considered the feasibility of the establishment of a life insurance company by the Florida Physicians Insurance Reciprocal. It was felt that such a program would be beneficial to physicians in Florida and that a base exists, through FMIT ownership of the applications and retention of business for all life insurance policies provided under the Florida Medical Insurance Trust.

### RECOMMENDATION NO. A-4

**RECOMMEND APPROVAL IN PRINCIPLE OF FORMATION OF A LIFE INSURANCE SUBSIDIARY COMPANY BY THE FLORIDA PHYSICIANS INSURANCE RECIPROCAL.**

**FMA Policies and Retention of Corporate Records** — Approved in principle that FMA policies (other than Charter and Bylaws; fiscal and judicial) which have been in existence for a period of five (5) years or more, shall be rescinded by the House of Delegates unless reenacted and directed that proposed recommendations for implementation be prepared for presentation to the House in 1980. The

# The Annual Meeting Photo Album

1, Past President Jack A. MaCris, M.D., St. Petersburg, and Eugene G. Peek Jr., M.D., Ocala, at one of the three sessi of the House of Delegates. 2, Mr. Jerrold A. Van Dyke (who became Dr. Van Dyke three days later) responds to presentat of a certificate recognizing his two years of service on the editorial staff of *The Journal*. 3, Mrs. Thomas B. Thames of Orla (left) turns her Auxiliary presidential gavel over to her successor, Mrs. B. David Epstein of Key Biscayne. 4, JFMA Associ Editor Clyde M. Collins, M.D., of Jacksonville, and Mrs. Gerold L. Schiebler of Gainesville sing a duet at the annual Edit Dinner. 5, Mr. Jack W. Herbert, retired President of Florida Blue Cross and Blue Shield, is escorted by his successor, William E. Flaherty of Jacksonville (left), and Blue Shield Board Chairman Joseph G. Matthews, M.D., of Orlando, to Speaker's Table of the House of Delegtes to receive a certificate of grateful recognition. 6, Mrs. Mary Parham, wife of FM Executive Vice President W. Harold Parham, D.H.A., and son Will. 7, Baldwin Lecturer James J. Kilpatrick (left) chats v FMA President O. William Davenport, M.D., of Miami. 8, FLAMPAC President William W. Thompson, M.D., of Fort Wal Beach, introduces U.S. Sen. Robert Dole, principal speaker at the annual Auxiliary—FLAMPAC Luncheon. 9, JF Associate Editor Clyde M. Collins, M.D., Jacksonville, presents the annual Editor's Award to Mrs. James D. Moody Orlando, Chairman of the Auxiliary Art Show. 10, J. Lee Dockery, M.D., Associate Dean for Academic Affairs at University of Florida College of Medicine, checks in at the registration desk with FMA staffer Marion Acuff.

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Board also approved a proposed schedule for retention of corporate records of the Association.

**Special Committee on Negotiations** — Requested the Florida Physicians Association to form a Committee on Negotiations for the purpose of helping individuals and/or groups in negotiating with third parties including government agencies, hospital boards and insurance agencies.

**MMJUA-PCF** — Authorized an actuarial review of the MMJUA-PCF to determine their actuarial soundness for the protection of Florida physicians and requested the State Insurance Commissioner, PIMCO, and the Florida Physicians Insurance Reciprocal to participate in the study.

**Physician-Hospital Contracts** —

RECOMMENDATION NO. A-5

THAT THE FLORIDA MEDICAL ASSOCIATION APPROVE THE PROPOSED POSITION STATEMENT INCLUDED IN THE DELEGATES' PACKETS REGARDING PHYSICIAN-HOSPITAL AND OTHER HEALTH CARE ENTITY CONTRACTS.

### FMA Councils and Committees

The single greatest asset of the FMA is its members and their individual and collective efforts to insure a viable and effective Association influence in all facets of health care delivery.

More than 260 physicians have served on Association councils and committees during the past year. Others have represented the Association in meetings and activities at all levels.

These dedicated physicians are far too numerable to pay individual recognition to in this report, but your chairman wishes to thank each and every one for the countless hours devoted to the many programs and activities in which the Association is involved for the betterment of the public health, and in the best interest of all the physicians of Florida.

The Board's actions regarding the reports and recommendations of councils and committees during the past Association year are summarized in the following pages and in the other reports of the Board. The Annual report of their individual activities is included in this Handbook.

## JUDICIAL COUNCIL

### St. Johns County Medical Society

The Charter to the St. Johns County Medical Society was revoked effective December 31, 1978. The Bylaws of the Florida Medical Association require that an unorganized county be assigned by the House of Delegates to a nearby County Medical Society upon the recommendation of the Judicial Council. Such County Medical Society will aid and supervise the public health and medical questions in the county so assigned, until this county is organized separately and hold their own County Medical Society Charter. It was the feeling of the Judicial Council that the Duval County Medical Society would be best equipped at this point in time to handle this assignment.

RECOMMENDATION NO. A-6

THAT ST. JOHNS COUNTY BE ASSIGNED TO THE DUVAL COUNTY MEDICAL SOCIETY, PURSUANT TO CHAPTER 11, SECTION 3, SUB-SECTION 8 OF THE BYLAWS OF THE FLORIDA MEDICAL ASSOCIATION.

**Flagler County Medical Society Charter** — The Judicial Council has given a great deal of consideration to the Petition from the requisite number of physicians who have requested a Charter from this Association. The Council was mindful that this County Medical Society will be composed of some of the members of the former St. Johns County Medical Society. However, it was felt that the Bylaws of the Flagler County Medical Society will allow for the Society to become a viable and productive society. The Council was impressed with the candor of the Charter Petitioners and their willingness to work toward making the Flagler County Medical Society an outstanding component of the Florida Medical Association.

RECOMMENDATION NO. A-7

THAT THE PROPOSED FLAGLER COUNTY MEDICAL SOCIETY BE ISSUED A CHARTER FROM THE FLORIDA MEDICAL ASSOCIATION.

**Impaired Physician Program** — Pursuant to the instructions of the Board of Governors the Judicial Council has undertaken to study the general issue of the impaired physician. The Chairman of the Membership and Discipline Committee, Ray Murphy, M.D., has been assigned to research this matter. At this point in time, Dr. Murphy has had numerous discussions with representatives from around the State in regard to the feasibility and content of an impaired physician program to be sponsored by this Association. This is a very delicate matter with many complexities. In order to gain as much input from around the State as possible, consideration is being given to a statewide meeting at which various speakers could be assembled and input gathered as to the best possible approach to this problem. This matter will be taken up in detail at the next meeting of the Judicial Council and further recommendations will be made to the Board at that time.

## COUNCIL ON MEDICAL ECONOMICS

**Second Surgical Opinion** — The Board reviewed current policy of the Association regarding Second Surgical Opinion programs. Although no substantial studies have demonstrated the cost effectiveness of second opinion programs, third parties including the federal government and major insurance purchasers, such as telephone companies, continue to establish second opinion programs. Principles of medical ethics already require attending physicians to seek "consultations" when deemed necessary and Medicine should not fall prey to adapting to the language developed outside of Medicine which now calls this service a "second opinion". Similarly the term "elective surgery" can better be defined as "non-urgent" surgery.

RECOMMENDATION NO. A-8

TO REAFFIRM THE POLICY OF THE FLORIDA MEDICAL ASSOCIATION REGARDING SECOND SURGICAL OPINIONS THAT: "THE FMA BELIEVES EACH PATIENT HAS A RIGHT TO CONSULT ANY PHYSICIAN OF HIS CHOICE. FMA BELIEVES EACH PHYSICIAN SHOULD GIVE A PATIENT HIS OPINION CONCERNING THE PATIENT'S NEEDS. FMA BELIEVES THE PRINCIPLES OF MEDICAL ETHICS ALREADY REQUIRES A SECOND OPINION WHEN THE PATIENT OR ATTENDING PHYSICIAN BELIEVES THIS TO BE INDICATED. FMA BELIEVES THE INTRUSION OF A THIRD PARTY INTO THIS RELATIONSHIP BY INSISTING UPON A SECOND SURGICAL OPINION PRIOR TO ELECTIVE SURGERY

**INCREASES THE COST OF MEDICAL CARE AND WILL NOT IMPROVE THE QUALITY OF CARE WHICH THE CITIZENS OF FLORIDA ARE NOW RECEIVING;" AND FURTHER, TO REAFFIRM THE JUDICIAL COUNCIL OPINION THAT A "PHYSICIAN'S PARTICIPATION IN A SECOND SURGICAL OPINION PROGRAM IS NOT UNETHICAL, PROVIDED THAT THE PROGRAM ALLOWS THE PATIENT REASONABLE FREEDOM OF CHOICE OF THE PHYSICIAN".**

**Committee on County Medical Societies**

**Standardized Membership Application** — Approved in principle a standardized FMA Data for Archives form and county medical society membership application be adopted and that the FMA offer to make these available to local county medical societies and further, to advise county medical societies that the Board of Governors recommended that the standardized form be finalized for presentation at the 1980 session of the House of Delegates.

**AMA Membership Recruitment** — Authorized a message promoting federation (AMA) membership be included with the 1979 dues statements prepared for county medical societies. The Board also approved that special AMA membership stickers available from the AMA be affixed to appropriate badges during the 1979 FMA Annual Meeting to promote membership in AMA.

**Liaison with County Society Executives** — Approved in principle the concept that county medical society executives should have adequate input into the activities of FMA but that it is primarily the responsibility of the Committee on County Medical Societies to insure improved communications and liaison with individual county medical societies.

**Ad Hoc Committee on State Board of Medical Examiners**

**Policy Statement on State Board of Medical Examiners** — At its January, 1979, meeting the Board of Governors requested the Special Ad Hoc Committee on the SBME to prepare a Policy Statement relative to the FMA's position concerning the State Board of Medical Examiners. This statement takes into consideration the current position and philosophy concerning the Board.

**RECOMMENDATION NO. A-9**

**THAT THE PROPOSED POLICY STATEMENT RE: THE STATE BOARD OF MEDICAL EXAMINERS BE ADOPTED AS INCLUDED IN THE DELEGATES' PACKETS.**

**Investigative and Legal Assistance** — Encouraged the State Board of Medical Examiners to utilize the most effective management tools available in determining its work load and personnel requirements including seeking additional investigative and attorney positions including upgrading classifications of investigators. Expressed support for SBME in accomplishing these objectives in the legislature.

**Investigative Procedures** — Took the position that the State Board of Medical Examiners should be thorough and agressive in its prosecutorial function and that all available witnesses who have relevant information to the issues be utilized as necessary in determining whether or not an individual physician has violated the Medical Practice Act.

Supported appropriate legislation that would enable the State Board of Medical Examiners to contract with the FMA or FMF to assist the Board in carrying out its investigative activities.

**Legislation** — Adopted the following positions regarding legislation affecting the SBME:

a. Opposed any legislation that would bifurcate the SBME into disciplinary Board and licensing Board.
b. Supported clarifying legislation in the Medical Practice Act that would define professional misconduct relative to kickbacks and rebates.

**Physician Trained Assistants** — Supported legislation if necessary to clarify the so-called "Bond Clinic Situation" so that there is no legal question regarding the ability of a trained medical assistant to perform any medical function so long as it is under control of a physician.

**Bylaws Amendments** —

**RECOMMENDATION NO. A-10**

**THE BOARD RECOMMENDS ADOPTION OF THE FOLLOWING AMENDMENT TO THE FMA BYLAWS:**

**Chapter IX, Committees** — Section 3, Duties and Functions Amend Item 1 as follows:

1. The Committee on Relative Value Studies and Fee Schedules shall be responsible . . .

(This amendment removes "and Fee Schedules" from the name of the Committee.)

## Report G
## Board of Governors

The motion of the Reference Committee that Report G of the Board of Governors be adopted.

## Report G
## Board of Governors
O. William Davenport, M.D., Chairman

The following supplemental report of the Board of Governors has been prepared summarizing actions which were not included in the Board's report in the Delegates' Handbook.

**Finance and Management**

The Board reviewed a special report of the Executive Vice President (at the April 1979 meeting) concerning Finances and Management.

This report clearly indicated the impact of inflation on your Association's finances. The Association is currently in sound financial condition; costs of operation continue to rise; it is not feasible to increase dues frequently and near maximum income is being derived from non-dues sources.

Your Board requested our President-Elect, Doctor Hodes, when making his appointments for the Association's 1979-80 year, to consolidate council and committee activities where feasible and avoid duplication of activities. The Board refined our legislative goals and activities and will continue to closely monitor all those activities that directly affect the FMA membership.

Your E.V.P. was requested to re-review management functions and reduce staff when possible (and it will not affect essential functions

and activities of the Association). Two independent management studies have been conducted this year and further efficiencies will be implemented where indicated.

### RECOMMENDATION G-1

**TO COMPLY WITH THE BOARD OF GOVERNORS EFFORTS TO CONSOLIDATE COUNCIL AND COMMITTEE ACTIVITIES, THAT THE FOLLOWING BYLAWS AMENDMENTS BE ADOPTED:**

**CHAPTER VII — BOARD OF GOVERNORS**

**Section 2. Duties and Functions**

11. The Board shall maintain standing committees of: ON:
    1. AMA delegates
    2. Board of past presidents
12. The Board shall maintain standing committees for:
    1. Allied health professions
    2. Voluntary health agencies
    3. County medical societies

**CHAPTER VIII — COUNCILS**

**Section 1. Organization**

1. Judicial
2. Legislation ~~and Regulations~~
3. Medical Economics
4. Medical Services
5. ~~Medical Systems~~ GOVERNMENT PROGRAMS
6. Scientific Activities
7. Specialty Medicine

**Section 3. Duties, Functions and Composition**

2. The Council on Legislation ~~and Regulations~~ shall direct and supervise the activities of the Association which pertain to state and national legislation ~~and regulations.~~ It shall develop and submit to the House of Delegates through prescribed channels state legislative programs. It shall devise methods to implement such approved programs. It shall assist in promoting national legislative programs sponsored by the American Medical Association and approved by the Florida Medical Association. ~~It shall maintain liaison with officials of state and national governmental agencies, specifically as it relates to legislation and regulations.~~ It shall report its activities regularly to the Board of Governors through the Executive Committee.

3. The Council on Medical Economics shall maintain liaison with health insurance agencies, ~~and~~ shall advise on industrial medicine relations, ~~and programs of the government such as Medicare, Medicaid, Workmen's Compensation, Vocational Rehabilitation and Veterans' medical services~~ AND THE COST OF MEDICAL CARE, AND it shall serve as a clearing house on fee schedules and other questions affecting the economics of medicine. It shall report its activities regularly to the Board of Governors through the Executive Committee.

4. The Council on Medical Services shall direct and supervise the activities of the Association which normally are classified as medical services, such as Public Health, Rural Health, School Health; PHYSICAL FITNESS, Emergency Medical Services and Emergency Communications, Drug Abuse, and Sports Medicine. IT SHALL MAINTAIN LIAISON WITH ALLIED HEALTH PROFESSIONS AND SHALL PROVIDE LIAISON, ANNUAL REVIEW, AND EVALUATION OF EACH VOLUNTARY HEALTH AGENCY RECOGNIZED BY THE BOARD OF GOVERNORS. It shall report its activities regularly to the Board of Governors through the Executive Committee.

5. The Council on ~~Medical Systems~~ GOVERNMENT PROGRAMS shall ~~maintain~~ MONITOR ~~liaison with foundations for medical care, professional review organizations, peer medical utilization review, hospitals and extended care facilities~~, PROGRAMS SUCH AS HEALTH SYSTEMS AGENCIES, THE WORKMEN'S COMPENSATION PROGRAM, MEDICAID, MEDICARE, and other government programs AND SHALL MAINTAIN LIAISON WITH THE GOVERNMENT AGENCIES ADMINISTERING SUCH PROGRAMS. It shall report its activities regularly to the Board of Governors through the Executive Committee.

6. The Council on Scientific Activities shall direct and supervise activities . . . it shall submit recommendations to the Executive Committee. ~~It shall maintain liaison with all recognized medical schools in the State of Florida.~~ It shall report its activities regularly to the Board of Governors through the Executive Committee.

**CHAPTER IX — COMMITTEES**

**Section 1. Organization**

Delete the last paragraph of this section which provides for a standing committee under the Board of Governors on Voluntary Health Agencies.

The Reference Committee reported that it had had the privilege of reviewing the 1978 financial audits of the Florida Medical Association, PIMCO, the Florida Physicians' Insurance Reciprocal, FLAMEDCO, and the Florida Medical Foundation, and found each of them to be in order. W. Harold Parham, D.H.A., and his staff were commended for the able management of the financial affairs of these organizations.

## Report of Public Relations Officer

The Reference Committee considered the report submitted by Dr. Vernon B. Astler, Public Relations Officer.

The motion of the Reference Committee that the report of the Public Relations Officer be adopted carried.

## Public Relations

Vernon B. Astler, M.D., Public Relations Officer

The FMA Public Relations Program has continued to grow. Pilot efforts were launched in 1976, and were strengthened and realigned in 1977. The key in 1978 has been recognition.

During the past year the public relations program has garnered awards from across the country. The Florida Chapter of the America Heart Association bestowed its Steve Yates Media Award to the FMA for the 30-minute film, *"It's Your Life . . ."* The film was also recognized at the biennial John Muir Medical Film Festival in California as a valuable contribution to continuing medical education. The Florida Public Relations Association presented the FMA with two Awards of Distinction in the Annual Golden Image Competition for *"It's Your Life . . ."* and the bi-monthly Medical Message columns.

The Medical Message columns took top honors in the regional competition of the Southern Public Relations Federation, and were named as a second place winner in the Jacksonville Advertising Federation Addy Awards Competition. In addition, the columns were recently named to receive the second place award of Merit in national competition sponsored by the International Association of Business Communicators.

Recognition has also come from members of the media in Florida. The regular release of news worthy material combined with the orderly delivery of Medical Message columns and radio programs have established the Florida Medical Association as a reliable and efficient source of material and information. Representatives of Florida newspapers, magazines, radio and television stations regularly contact the FMA seeking additional information or a physician in their area who can be used for source material.

As more and more media outlets recognize that FMA-developed material is informative and of value to the public, utilization is increasing. The number of outlets regularly publishing the Medical Message column is now approaching 500, and the news releases are enjoying similar success. Random surveys indicate that the Medical Message radio programs are being utilized regularly, and in some counties, utilization approaches 85 percent of all radio stations. The television public service announcements continue to enjoy sustained usage across the State.

The key contact physician network for the news media is growing and becoming increasingly active in public relations activities. In the past year a number of these physicians have assisted in the public relations program by contacting media outlets and securing air time or publishing space.

The FMA Public Relations Program is also developing new dimensions, which will serve to further express medicine's side of the story. A third film effort will be shown across the state in late May, and represents a new concept in FMA audio visuals. The program deals with nutrition and the important part it plays in maintaining a healthy heart. Filmed in Miami, the program was produced in two formats, two minutes and five minutes, and will be broadcast to take advantage of established audiences.

Another dimension of the Public Relations Program has been the increased reliance upon the FMA by members of the Florida news media. This represents a significant advance for the Association, and is developing into a tool of mutual importance to both the Association and the media.

The continuing efforts of the Public Relations Program have done a great deal to establish the FMA as a reliable source of material. Medical Message columns addressing health matters of concern to most Floridians are released twice a month, and news releases are developed on a regular basis. The radio programs have become solidly rooted, and the television public service announcements have become staples for many Florida television stations.

The two earlier FMA film efforts, *"A Matter of Life . . ."* and *"It's Your Life . . ."* remain in continued demand across the country. *"A Matter of Life . . ."* was selected for inclusion in the Library of Congress film collection during the past year, and both films maintain heavy loan traffic. Additional copies of *"It's Your Life . . ."* have been ordered due to the great number of purchase requests.

The FMA Speaker's Bureau continues to fill requests for medical speakers across the State. Chaired by Edward R. Annis, M.D., the Speaker's Bureau has been called upon to address numerous organizations throughout the past year.

The FMA Public Relations Program is enjoying the recognition of other state medical associations, too. Several state groups have requested information on setting up programs modeled after that of the FMA, and others have asked permission to use FMA concepts, in particular the Medical Message columns and radio programs.

## Committee on AMA Delegates

The motion of the Reference Committee that the Report of the AMA Delegates be adopted carried.

## AMA Delegates

James T. Cook, M.D., Chairman

It has been my pleasure to serve as Chairman of the AMA Delegates during the past year and I greatly appreciate the assistance of the Vice Chairman, Joseph C. Von Thron, M.D., Cocoa Beach. I wish to thank all our delegates who have given of their time and efforts in support of the best interests of Florida's physicians in the AMA's House of Delegates: Rufus K. Broadaway, M.D.; Richard G. Connar, M.D.; Samuel M. Day, M.D.; Charles K. Donegan, M.D.; Joseph C. Von Thron, M.D. I would like to pay special thanks to our alternate delegates for their interest and full attendance at all meetings and for their assistance at reference committees and at sessions of the House of Delegates: Vincent P. Corso, M.D.; Eugene G. Peek, Jr., M.D.; T. Byron Thames, M.D.; William J. Dean, M.D., Francis C. Coleman, M.D.; Jack Q. Cleveland, M.D.; and Vernon B. Astler, M.D. Your FMA Officers and Board, and officers of component county medical societies have attended the meetings and supported the efforts of your delegation.

Florida's delegation continues as a respected voice in the House of Delegates and several of our delegation hold important council and committee assingments: Burns A. Dobbins, M.D., Chairman, AMA Judicial Council; Rufus K. Broadaway, M.D., Chairman, AMA Council on Long Range Planning and Development; Richard G. Connar, M.D., Member, Council on Medical Education. Several of our delegates have served on reference committees at the annual and interim meetings of the House.

The gravity of the issues facing organized medicine have been reflected in the large volume of issues to come before the House, issues that pose imminent threats to the quality of medical care and the private practice of medicine.

The following is a summary of the activities of your Florida Delegation during the past year, including the Annual Meeting, June 17-22, 1978, in St. Louis and the Interim Meeting, December 3-6, 1978.

**AMA President Elect** — The Florida Delegation with the full and enthusiastic support of the Board of Governors nominated Jere W. Annis, M.D., Lakeland for the office of President Elect of the AMA at the Annual Meeting in St. Louis. The entire delegation and many other physicians worked tirelessly and enthusiastically in behalf of Dr. Jere's candidacy. Dr. Frank Coleman served as Chairman for Dr. Annis' Campaign Committee and spent long and arduous hours both at home and at AMA working for Jere's candidacy. The wives attending the meeting also provided much help in the Florida Hospitality Room and served as hostesses at the Reception held in Jere's honor. Also, medical students and residents from Florida participated in our caucuses and were enthusiastic in their support and assistance in the campaign. Unfortunately, we were unable to overcome the early lead which had been built up by the opposing candidate. In spite of the loss, the FMA Delegation demonstrated a unity and camaraderie which was deeply gratifying and which earned plaudits from their fellow Delegates for the level of professionalism with which this campaign was conducted. There is no question that the FMA gained in respect among its colleagues from other states which will be beneficial in the future.

**FMA Delegation — Chairman and Vice Chairman** — Your Chairman is grateful for the confidence shown in me by my fellow Delegates in asking that I continue to serve as Chairman of the Delegation for another year. Dr. Joseph C. Von Thron was elected as Vice Chairman. Dr. Burns Dobbins, who previously served as Vice

Chairman, has provided much assistance in conducting the activities of the Delegation, and I am most appreciative for his many contributions. Dr. Dobbins has been appointed Chairman of the AMA Judicial Council.

### House of Delegates Actions on Florida Resolutions

**Resolutions Introduced At The Annual Meeting, June 17-22, 1978** — The Florida Delegation introduced six resolutions at the Annual Meeting in June in behalf of the FMA as directed by the House of Delegates at its meeting in May 1978. The following summarizes the actions taken regarding these resolutions. (For easy reference, the resolution number is the same as adopted by the FMA House of Delegates as reported in the July 1978 Proceedings issue of the *FMA Journal).*

**Resolution 78-14 Blood Banking** — Adopted as amended:

RESOLVED, That unless the American Blood Commission has revised its policy and accepts the concept of the recipient's personal responsibility for replacement of blood, especially in regions where the concept is now used as an effective motivational mechanism, the American Medical Association re-evaluate the status of its membership in the American Blood Commission.

**Resolution 78-24 Relative Value Studies—**

RESOLVED, That the Congress of the United States be urged to make necessary revisions in the laws to overturn the recent actions of the Federal Trade Commission in outlawing various Relative Value Schedules, and be it further

RESOLVED, That this resolution be referred by our Delegates to the AMA House of Delegates, requesting AMA support for our position.

Referred to the Board of Trustees

At the Interim Meeting in December, the House reaffirmed the previous policy adopted in 1977 that the AMA continue to pursue through all appropriate means the introduction and enactment of national legislation designed to confirm the authority of the medical profession to develop and use Relative Value Studies.

**Resolution 78-12 Substandard Trained Physicians** — Adopted a substitute resolution:

RESOLVED, That the American Medical Association Council on Medical Education develop a mechanism for identification of those residency training programs which produce significant number of physicians apparently inadequately trained in their specialty.

**Resolution 78-20 HEW Release of Physician Fees** — Adopted as amended:

RESOLVED, That the American Medical Association continue to pursue appropriate legal recourse to prevent the Department of Health, Education and Welfare from releasing the names of individual physicians and their income information contained in Medicare records.

**Resolution 78-26 Criticism from the President of the U.S.** — Adopted with commendation of AMA leadership for its promptness in refuting President Carter's unjustified charges.

**Resolution 78-17 Review of Governmental Health Care Programs** — Adopted an alternate resolution:

RESOLVED, That any cost containment recommendations or activities adopted by the American Medical Association be equally applied to federal and state government hospitals, facilities and medical programs and to government administrative mechanisms surrounding medical care.

### Resolution Introduced At The Interim Meeting, Dec. 3-6, 1978

**National Health Insurance** — The most significant and far reaching achievement of the Florida Delegation during the year was the overwhelming approval of the Florida Resolution on National Health Insurance by a 2 to 1 majority of the House of Delegates in lieu of the Reference Committee recommendation for approval of Report MM of the Board of Trustees. Report MM called for reintroduction in the 96th Congress of an AMA sponsored comprehensive national health insurance bill similar to HR 1818 that died with adjournment of the 95th Congress. The House also approved a second motion by the Florida Delegation that Resolution 62 be referred to the Board of Trustees with instructions that an AMA National Health Insurance Bill be introduced in the Congress **only** if absolutely necessary, and further that if it was necessary to introduce a bill, that it contain **only** those principles outlined in the Florida Resolution:

Whereas, It is a recognized fact that Americans have the best medical care and delivery system in the world today, and most polls indicate the public is generally satisifed with both the quality and quantity of medical services. Moreover, the polls have consistently reflected that the American people hold their individual physician in higher regard and trust than any other professional. It is this very personal doctor-patient relationship that will be dismantled and ultimately destroyed by national health insurance, and

Whereas, The primary thrust for a nationalized, socialized system of medical care has continuously come from the political arena where logic is often lacking, and

Whereas, At this time, it would be unwise for organized medicine, at any level, to sponsor or support federal legislation to further nationalize or socialize physicians' services in this country, and

Whereas, There is a need to improve our present system — not by discarding or disregarding our present one — therefore, be it

RESOLVED, That the American Medical Association recommend to the Congress of the United States of America modifications to our present health care system embodying the following principles:

1. Requiring minimum standards of adequate benefits in all health insurance policies sold in the United States with appropriate deductible and co-insurance.
2. A simple system of uniform benefits provided by the federal, state, and local governments for those individuals who are unfortunate enough (through no fault of their own, i.e., age, disability, financial hardship, etc.) not to be able to provide for their own medical care.
3. A nationwide program by the private insurance industry of America (and government if necessary for reinsurance) to make available catastrophic insurance coverage for those illnesses and individuals where the economic impact of a catastrophic illness could be tragic. All catastrophic coverage should have an appropriate deductible and co-insurance to make it economically feasible and to avoid abuse.
4. A program developed pursuant to these principles should be administered at the state level with national standardization through federal guidelines.

The delegation wishes to extend to Dr. Joe Von Thron appreciation and commendation for his outstanding leadership regarding this vital issue and for his eloquent and conscionable presentation before the House of Delegates, and which no doubt contributed significantly to the overwhelming adoption of the Florida Resolution.

### Other House Actions of Major Importance

**Chiropractic** — The American Medical Association House of Delegates considered a number of resolutions which addressed the AMA's current Principles of Medical Ethics as pertains to a physician's

free choice in determining his/her professional relationship with licensed limited practitioners, and which also addressed the AMA's action as pertains to settlement of the suit brought by certain chiropractors in Pennsylvania.

The House adopted a Substitute Resolution which provides:

1. That the AMA support the right of a physician to choose those persons whom he or she will accept as patients and also to exercise his or her choice by the terms of contractual arrangements with other physicians, medical groups, hospitals or other institutions.

   The AMA will continue to support a physician's right to freely choose those whom he will serve in the absence of legal considerations to the contrary.
2. That the obligations which a physician has to provide information to a patient or any other party are those required by customary good medical practice and law.
3. That the Judicial Council be requested to re-consider Article 3.70 of Section III.
4. That the AMA continue to warn the public of the hazards to health of entrusting the diagnosis and treatment of diseases such as cancer, diabetes, malignant hypertension, cardiovascular stroke, and infections to practitioners who, in the treatment of these conditions, rely upon the theory that all disease is caused by misalignment of spinal vertebrae and can be cured by manual manipulation of the spine.
5. That the authority of the AMA Board of Trustees to have made and to have agreed to the proposed settlement in the Slavek case be acknowledged and affirmed.
6. Nothing in the above shall be construed or interpreted as an amendment to the AMA's current Principles of Medical Ethics.

This Substitute Resolution has in no way changed the 1966 AMA policy that defined chiropractic as an unscientific cult as a result of its unscientific approach to disease causation.

**Allied Health Personnel** — The House reaffirmed the physician's right to delegate medical functions to allied personnel who work under his supervision and direction. The House expressed the feeling that this is entirely appropriate and particularly needed if categories of health personnel such as physicians' assistants are to be utilized effectively. The AMA Councils on Legislation and Medical Services have developed suggested model amendments to state legislation regarding the use of physician's assistants.

**CPT-4** — The House endorsed an aggressive marketing program to support the use of Current Procedural Terminology, 4th Edition. It was noted that CPT-4 has some 7000 code classifications as compared to 3000 contained in the International Classification of Diseases.

**Medical Ethics** — The House adopted a preliminary report of the Ad Hoc Committee on the Principles of Medical Ethics that was appointed in 1977 and charged to consider revisions to the AMA Principles of Medical Ethics adopted by the AMA in 1957. The Committee has until July 1979 to complete their recommendations. The current report reflects the following: A code of ethics is necessary for physicians. The medical profession is no longer the sole guardian of the public's health and the code needs to reflect this change and the body that generates the code of ethics (The House) should be distinct from the body that interprets and enforces them (Judical Council).

**HMO's** — The House reaffirmed support of the concept of neutral public policy and fair market competition among all systems of health care delivery.

**Cost of Medical Care** — The House adopted a resolution recognizing the medical and health care costs have increased in part due to increased demand for services as a result of third party payment, government regulations, PLI premiums, and deficit spending by government.

**Second Opinion Programs** — The House of Delegates opposed the concept of mandatory second opinions or the imposition of financial penalties by third party payors for not obtaining a second opinion. The House reaffirmed the right of a patient or a physician to seek a second opinion voluntarily from any physician of his/her choice and supported the concept that when a second opinion is required by a third party payor, that opinion should be at no cost to the patient.

**Cigarette Smoking** — The House of Delegtes took its strongest stand to date against cigarette smoking by resolving to encourage the U.S. Department of Agriculture to study ways to discontinue the federal tobacco price support system and offered support for state anti-smoking legislation. The House also expressed its wish that the AMA increase its efforts to advise the public as to the hazards of smoking and to exercise leadership in helping the public develop a positive attitude about healthful life styles including not using tobacco products. products.

**Medical Education** — The House directed the Board of Trustees to study the subject of medical school financing and indebtedness. The House noted that high cost of medical education has forced medical school graduates into only the most lucrative specialties and that payback conditions of loans and other tuition programs may seriously affect the medical school student's choice of type and location or practice.

**Government Regulations and Accountability** — The House adopted a report on deregulation of the medical profession including reintroduction of a bill in the 96th Congress to require that federal agencies include financial impact statements in all proposed regulations and programs.

**Voluntary Fee Restraint** — The House adopted a report calling upon physicians to voluntarily restrain the rate of increase in their fees over the next two years. The House also urged a series of actions by hospitals and hospital medical staffs aimed at curbing costs.

## Board of Past Presidents

The motion of the Reference Committee that the Report of the Board of Past Presidents be adopted carried.

## Board of Past Presidents

George S. Palmer, M.D., Chairman

The Board of Past Presidents held its annual breakfast meeting at 8:00 a.m., Friday, May 5, 1978, in the Secretariat Room of the Diplomat Hotel, Hollywood. This meeting was attended by a record number of 19 out of the 22 living past presidents.

Your Chairman for 1978-79 wrote an article on the Board of Past Presidents for the FMA organizational issue of JFMA which appeared in February 1979.

All past presidents are still vitally interested in the FMA and its aims and goals for its members, the medial profession and patients (the public). We are glad to contribute in any way that we can.

The Past Presidents do wish to continue to be notified of and invited to meetings of the Board of Governors and any special or interim meetings of the House of Delegates or any other events of note and importance.

## FMA Speaker's Bureau

The motion of the Reference Committee that the Report of the FMA Speaker's Bureau be adopted carried.

# Annual Meeting Special Activities The Nostalgia Party

The traditional Friday evening President's Reception was enlarged into a Nostalgia Theme Party with FMA President and Mrs. O. William Davenport, M.D., leading revellers on a journey to yesteryear. 1, President-Elect and Mrs. Richard B. Hodes, M.D., of Tampa, at the piano. 2, 83-year-old Walter C. Jones, M.D., of Coral Gables, who was President of FMA at the outbreak of World War II, demonstrates that age is just a matter of the mind . . . and he's got a young mind. 3, Dr. Hodes gets an assist with his cuffs and collar from Mrs. Hodes and President O. William Davenport, M.D., of Miami; 4, Dr. Davenport and a friend, Joseph A. de Cenzo, M.D., of Miami, sing an original creation about the FMA. 5, Mrs. Nestor J. Madariaga and daughter Sandra of Miami were judged to have the best costumes. 6, Music was furnished by The Jazz Express. 7, Samuel M. Day, M.D., of Jacksonville, and wife in a mockup of a vintage auto.

# The Health Run for Fun

While most FMA conventioneers slept, at least 68 physical fitness buffs sprang from the innersprings to make the 7:30 a.m. starting time for the FMA Health Run for Fun. Although a miscalculation by the local constabulary staked the course out far short of the projected 5,000 meters, almost everyone enjoyed the jaunt. 1, They're off. 2, James B. Perry, M.D., Fort Lauderdale, Paul S. Jarrett, M.D., of Miami, and FMA staffer Cindy Kelly prepare to record the times of the finishers. 3, FMA Executive Director Donald C. Jones of Jacksonville gets plenty of help as he mixes up a thirst-quenching potion. 4, Mrs. Jane Franklin of Jacksonville and 5, Robert E. Duncan, M.D., of Jacksonville are greeted and timed at the finish line by Drs. Perry and Jarrett. 6, Mrs. John E. Thrasher of Jacksonville sprints toward the finish line.

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## FMA Speaker's Bureau

Edward R. Annis, M.D., Chairman

The inestimable value of personal contact continues to be demonstrated through the activities of the FMA Speaker's Bureau. Initial response to the concept was excellent, and the climate remains favorable — the public is interested in hearing medicine's story.

An announcement mailed to major civic and professional organizations in Florida has resulted in 12 requests for the services of members of the Speaker's Bureau. Organizations which have taken advantage of this service include: Florida Association of Secondary School Principals, Medical Education & Research Foundation of West Florida, Inc., Florida Retail Federation, The Associated General Contractors of America, Inc., Florida Association of Elementary School Principals, Florida Association of Life & Casualty Insurers, Inc., and Florida Bankers Association. In addition, FMA officers serving on the Speaker's Bureau have been individually approached to address civic groups and county medical societies as a direct result of their involvement on the Bureau.

A number of organizations which utilized the services of the Speaker's Bureau during 1977 repeated their programs in 1978. Other groups have highlighted the presentations of the FMA Speaker's Bureau representatives with press conferences and other activities.

Another announcement alerting state and national groups to the availability of this service will be released in late Spring.

## Committee on County Medical Societies

The motion of the Reference Committee that the report of the Committee on County Medical Societies be adopted carried.

## Committee on County Medical Societies

Joseph P. Hendrix, M.D.

The Committee on County Medical Societies held two meetings during the past Association year, on August 19, 1978, and a telephone conference on March 28, 1979. The following is a summary of the Committee's activities.

**FMA Board of Governors Referrals** — The Committee considered two matters at the request of the FMA Board of Governors:

1. Organization and liaison with county medical society executives
2. Standardized membership application form

The Committee was also requested to review Resolution 78-19 and the proposed guidelines for HSA Monitoring at the state and local level including the functions and responsibilities of FMA and local county medical society staffs.

The Board of Governors had referred the question of organization and functions of county medical society executives to the Committee for review and recommendations as to an appropriate manner of liaison with county society executives.

The Committee commended the desire of the county medical society staffs for improved communications and expanded knowledge in their important work and encouraged their maintaining close liaison with FMA Field Office Representatives in their area and the FMA Headquarters Office in Jacksonville.

The Committee felt that while the county medical society, executives should have an adequate level of input into the activities of FMA, it is the responsibility of the Committee on County Medical Societies to insure improved communication and liaison with individual county medical societies.

**Standardized Membership Application** — The Committee reviewed a request that the FMA consider a standardized membership application which could be used for county medical societies, and also as the FMA Data for Archives form as required by the bylaws.

The Committee conducted a survey of county medical societies regarding the membership applications currently in use. After review of the applications received, a proposed composite application and Data for Archives form was prepared. This form includes all information required by the FMA Archives Form and has been expanded to include whatever additional information could be anticipated to be requested by county medical societies. The application was designed so that the first part (FMA Data for Archives Form) could be prepared in triplicate and supplied to county societies with one completed copy returned to the FMA.

The Committee recommended to the Board of Governors that a standardized FMA Data for Archives Form and county medical society membership application be adopted and that the FMA offer to make these available to local county medical societies.

**Resolution 78-19 Staff Personnel for HSA Monitoring** — Resolution 78-19 Staff Personnel for HSA Monitoring was adopted by the House. The resolve of this Resolution provided that FMA assign more adequate FMA and county medical society staff to ensure effective parallelling of all nine HSA's in Florida. The FMA Committee on HSA's has developed guidelines for HSA monitoring at the state and local level including the functions and responsibilities of committees at both the state and local level. In addition, the Committee has outlined responsibilities of FMA staff and local county medical society staff in monitoring HSA's.

The Committee discussed at great length the ramifications of PL 93-641 and the critical need for complete physician involvement. The Committee discussed the current composition and activities of the state Committee on HSA's, the committees which have been established at the local level and also the current staffing and availability of legal counsel.

The Committee stressed the importance of the FMA ensuring that all staff involved at the state and local level in HSA activities be knowledgeable in the health planning process and that adequate legal counsel be available at all times. It was felt that a concentrated educational program regarding HSA's should be carried out by the state HSA Committee for the membership and for county medical society executive staff.

The Committee recommended to the Board of Governors that an outline for HSA monitoring developed by the Committee on HSA's be adopted and implemented at the earliest possible time and further that a concentrated educational program for FMA members including component county medical society staff be conducted by the state Committee on HSA's.

**AMA Membership Recruitment** — The Committee reviewed the current AMA membership in Florida. It was noted that, while there were areas of disagreement with AMA policy, unification is vital in dealing with many crucial issues facing medicine in the country. It was acknowledged that the AMA was the best possible spokesman for the private practicing physician on the national level.

The Committee also reviewed and expressed its choice for one of two pamphlets to be sent to the FMA membership for promoting Federation membership.

The Committee felt that one fact which affected membership participation was the requirement that dues be paid in one lump sum. It was noted that the continuing increase in number of professional association dues, plus PAC dues, was becoming a financial hardship for many physicians and it was felt that membership was becoming a question of priorities.

The Committee recommended to the Board of Governors that a message promoting Federation Membership be included with the dues statements prepared for county medical societies and further that the Board study the feasibility of quarterly payments for FMA, AMA and PAC dues which may be a means of encouraging broader membership.

The Committee also recommended that special AMA membership stickers available from the AMA be affixed to the badges of AMA members attending the FMA Annual Meeting in an effort to promote AMA membership among non AMA members.

**FMA Leadership Conference** — One of the responsibilities of the Committee was to make recommendations for the Program for the 1979 FMA Leadership Conference.

The Committee encouraged that the program for the 1979 Leadership Conference place major emphasis on HSA activities at the national, state and local level and that the Conference also include a comprehensive segment on FMA's Public Relations and Field Office activities.

**FMA Legislative and Public Relations Activities** — The Committee commended the FMA for its efforts in improving liaison and communications with its component county medical societies, expressed support for the establishment and activities of the FMA Field Offices and encouraged the continued expansion of this vital link between FMA and the grass roots membership. The Committee further expressed the desirability of placing more emphasis on publicizing these activities to the membership.

## Ad Hoc Committee on the State Board of Medical Examiners

The motion of the Reference Committee that the report of the Ad Hoc Committee on the State Board of Medical Examiners be adopted as printed in the handbook carried.

### Ad Hoc Committee Re: State Board of Medical Examiners

Benjamin M. Cole, M.D., Chairman

The 1979 Annual Report of the Board of Governors Ad Hoc Committee, Re: The State Board of Medical Examiners will summarize the deliberations of this Special Committee and the positions taken by the Committee during the past year. The Committee has met formally on one occasion during the past year and has considered, during the year, numerous suggestions and matters relating to the procedural aspects of the Medical Practice Act. The Committee membership during the past year has consisted of Ben Cole, M.D., Richard S. Hodes, M.D., William W. Thompson, M.D., Vernon B. Astler, M.D., Jack A. MaCris, M.D., James B. Perry, M.D. and Luis M. Perez, M.D.

The Committee's activities are summarized under the appropriate headings as follows:

1. **Liaison with the Board of Medical Examiners**. Through this Committee, the Board of Governors has maintained a close and healthy liaison with the Board of Medical Examiners. This relationship has made for dramatic improvement in communications with the membership of the Florida Medical Association relative to the activities of the Board of Medical Examiners. It is expected that this Committee will continue its active involvement in the liaison process with the Board of Medical Examiners in order to continue to provide organized medicine's input.

2. **"Sunset Law"**. Under the Sunset Law the legislature this year will be reviewing all state Occupational and Professional Licensing Boards. The Ad Hoc Committee has been working on suggested changes to the Medical Practice Act that can be combined with proposals from the Board of Medical Examiners. With the ever increasing public scrutiny given to all activities of physicians, it becomes important that the Board of Medical Examiners function in an independent and objective environment. Recently the Ad Hoc Committee has developed a Policy Statement regarding the Board of Medical Examiners that supports a strong Board of Medical Examiners with adequate investigative and legal staff who can carry out the responsibilities of the Board to fully investigate and adjudicate activities of licensed doctors of medicine to assure ethical and medical competency of these practitioners. Moreover, the Committee in its policy statement, feels that the Board should have final authority for all rules affecting licensees and final authority to review, examine applicants, and to issue licenses to physicians and physician extendors.

3. **The Bond Clinic Issue.** The Committee, during the course of its deliberations, addressed the conflict that was created between the Bond Clinic and the Florida State Board of Nursing. This matter related to the State Board of Nursing's attempt to prohibit a physician's trained medical assistant from performing functions in the physician's office that are deemed, by the Board of Nursing, to be nursing functions. This matter resulted in a recommendation to the Board of Governors that the Florida Medical Association support legislation to clarify this matter so that there is no legal question regarding the ability of a trained medical assistant to perform any medical functions, so long as the function is performed under the control and supervision of a physician. This recommendation was approved by the Board of Governors and will be considered during the 1979 Florida Legislative session.

4. **Board of Medical Examiners Procedures.** The Ad Hoc Committee considered throughout the year, several cases in which the Board of Medical Examiners had conducted final hearings. Having reviewed these matters the Committee recommended to the Board of Governors, said recommendation being approved by the Board, that the Board of Medical Examiners should be thorough and aggressive in its prosecutorial function and further that all available witnesses who have relevant information to the issues of a particular case be utilized to the extent necessary to prove whether or not an individual physician has violated the Medical Practice Act.

5. **Other.** The Committee considered several other matters that were of interest to it during the course of last year. One particular matter of concern was the lack of specific definition in the Medical Practice Act regarding kickbacks and rebates. The Committee recommended to the Board of Governors, and the Board of Governors approved that the Florida Medical Association support clarifying legislation in the Medical Practice Act that would better define professional misconduct relative to "kickbacks and rebates".

## Florida Medical Foundation

The motion of the Reference Committee that the report of the Florida Medical Foundation be adopted, with the exception of those items referred to other Reference Committees, carried.

### Florida Medical Foundation

Eugene G. Peek Jr., M.D., President

The Florida Medical Foundation continues to play an important role in Florida Medicine through its many activities. The Board of Directors of the Foundation met regularly in conjunction with meetings of the FMA Board of Governors. The following is a summary of the Foundation's activities during the past year.

**Peer Medical Utilization Review** (Ref. Comm. No. V) — It was another active year for the Committee on Peer Medical Utilization Review (PMUR) Chaired by Frank B. Hodnette, M.D. The Committee met on May 1-2, 1978, August 18-19, 1978, October 6-7, 1978, and February 2-3, 1979. Meetings are also scheduled April 6-7, 1979, and May 21-22, 1979, immediately prior to the FMA Annual Meeting.

The Procedures for PMUR underwent a major revision last year incorporating many changes to improve fairness of review and reduce duplication of effort.

The Committee conducted forty-six initial reviews and thirty-three peer review appeals. In addition, the Committee conducted seventeen health insurance appeals. There has been an increase in the number of insurance carriers taking advantage of the Foundation's health insurance review mechanism. Approved by the Board of Governors, the Committee now reviews health insurance cases evaluating medical necessity.

The Committee feels that its activity in PMUR has been one of the most meaningful efforts undertaken by the Foundation. Since the program began in 1972, there have been 729 physician cases referred to PMUR.

**Medical Student Loans** — The Foundation has a Student Loan Program administered through the Florida National Bank with the Foundation serving as guarantor. The Program continues in a moratorium status until sufficient loans have been repaid to remove the serious threat to the solvency of the Program.

Great strides have been made during the past year to improve the status of the student loan program. Since the last Annual Report, the number of in-school loans has been reduced from sixty-nine loans with a face value of $163,605.70 to thirty loans, with a face value of $76,652.78. Only five of these loans have matured and have not yet been converted to a repayment schedule as compared to twenty-six at this time last year. There are eighty-two loans in a repayment status with a total face value of $208,111.87. Of these loans, only three are delinquent representing $10,693.49 compared to seven loans totalling $19,247.42 last year. During the past year, eighteen loans, amounting to $36,791.59 were repaid by the recipients. The Foundation as guarantor has paid ten delinquent loans totalling $26,394.61 and is diligently pursuing the collection of these defaulted loans.

**Committee on Medical Education** (Ref. Comm. No. I) — The Foundation's Committee on Medical Education, Chaired by Robert H. Threlkel, M.D., of Jacksonville, received word in December 1978 that its continuing medical education program had been reaccredited for three years by the national Liaison Committee on Continuing Medical Education.

As an accredited co-sponsor, the Committee during a 12-month period that ended March 31, 1979, approved 14 credit applications and designated a total of 210 hours of AMA Category 1 Credit. One of these applications was for co-sponsorship of the scientific program at the 105th Annual Meeting of the Florida Medical Association, for which 20 hours of Category I Credit were awarded.

During 1978-79, the Committee developed guidelines for determining reasonable tuition and registration fees for continuing education activities. These guidelines are being applied to all application reviews, and fees charged participants are being taken into consideration in determining whether the Foundation will be involved as a co-sponsor.

In another major project, the Committee began its Scientific Speaker Registry duing the year. The registry contains the names of more than 300 Florida physicians who have expressed willingness to give lectures within the areas of their expertise to hospital medical staffs, county medical societies and other sponsors of continuing education programs.

**Research Grants** (Ref. Comm. No. I) — The Council on Scientific Activities of the Florida Medical Association reviews and makes recommendations regarding the funding of Florida Medical Foundation research grant applications. Due to a low balance in the Foundation's research grant account, no applications were considered this year. The Committee received and accepted status reports on all outstanding research grants.

**Caduceus Prints** — The Foundation continues to make available for a $300 tax deductible donation a limited number of registered prints of the "Caduceus" by noted Florida artist Lee Adams. $56,400 has been received from this source since the prints were made available in December 1975. Information regarding these prints may be obtained by writing to the Florida Medical Foundation. The proceeds from this project are utilized for the primary purposes of the Foundation which are:

1. Improvement of the health and of the medical care of the people of Florida.
2. Sponsorship of graduate and postgraduate medical education.
3. Aid to persons needing financial assistance who are pursuing an education in medicine.
4. Aid to deserving indigent or destitute physicians in need of assistance.
5. Promotion and sponsorship of medical research.

**FMA Auxiliary** — The Foundation is grateful to the Florida Medical Association's Auxiliary for their continued efforts to raise funds for the FMF through various Auxiliary projects.

## Florida Physicians Association

The motion of the Reference Committee that the report of the Florida Physicians Association be adopted carried.

## Florida Physicians Association

David T. Overbey, M.D., President

The 1979 Annual Report of the Florida Physicians Association summarizes the purpose and major area of activity of this organization. Since the last report, the president of the FPA has reported to the Board of Governors an up-date summation of the financial status and major areas of concern of the Florida Physicians Association. During the last year the Executive Committee of the FPA has consisted of David T. Overbey, M.D., President; John A. Dyal, Jr., M.D., Vice President; Warren M. Barrett, M.D., Treasurer; H. Quillian Jones, Jr., M.D., Secretary; James T. Cook, M.D., Immediate Past-President; Charles J. Kahn, M.D, FMA Representative; O. William Davenport, M.D., FMA Representative; and W. Mahon Myers, M.D., District Director.

During the past year the Florida Physicians Association has been quietly collecting annual dues and monitoring various issues in which this organization could possibly involve itself. Basically, the Florida Physicians Association was set up to undertake activities that the FMA could not do because of Charter restrictions, or possible legal ramifications. Areas in which the Board of Directors of the Florida Physicians Association have looked into as activities which could possibly be undertaken are bargaining agents for its members with third parties, including governmental agencies and litigation which it might enter into individually or with other organizations. The Florida Physicians Association has now reached a point where its involvement in such activities would be economically feasible. The Board of Directors of the organization is looking forward to the next year and will actively study any potential matter in which this organization might involve itself. The organization is still attempting to expand its

membership to include as many members of the Florida Medical Association as possible.

## Judicial Council

The motion of the Reference Committee that the report of the Judicial Council be adopted carried.

## Judicial Council

James A. Winslow Jr., M.D., Chairman

The 1979 Annual Report of the Judicial Council will summarize the major areas of activity that occupied the Council's time and energy since the last Annual meeting of the Florida Medical Association, held in May of 1978. The Council's duties, functions, and composition are specifically prescribed in Chapter VIII,, Section 3 of the Florida Medical Association's Bylaws. Generally, it is the function of the Judicial Council to direct and supervise the activities of the Association which pertain to questions of medical ethics, dissension, and disputes referred to the Association for investigation and adjudication, complaints by patients against members of the Association, and questions of membership and disciplinary action. The Bylaws of the Florida Medical Association further provide that the component county medical society shall be the basic unit for censuring, suspending, or otherwise disciplining its members. Any member subject to such action has the right to appeal to the Judicial Council, in the manner prescribed by the Bylaws. Since the last Annual Report of your Judicial Council your Chairman has reported to the Board of Governors up-to-date summations and recommendations relative to major areas of Council concern. Since the last Annual Meeting of the Association, the Council has met on the following occasions: May 3, 1978; August 12, 1978; November 17, 1978; and February 24, 1979. The current membership of the Council is as follows: James A. Winslow, Jr., M.D., Chairman, Tampa, Florida; Joseph H. Davis, M.D., Miami, Florida; Robert J. Brennan, M.D., Ft. Lauderdale, Florida; and O. Frank Agee, M.D., Gainesville, Florida. Since our last report Dr. Brennan and Dr. Agee replaced former council members John J. Cheleden, M.D. and William W. Thompson, M.D. The Council has been staffed by Mr. John Thrasher, FMA Legal Counsel.

The Council's activities are summarized under the appropriate headings as follows:

1. **St. Johns County Medical Society.** During the past year your Council devoted a great deal of its time and energy to the serious problems that confronted the St. Johns County Medical Society. At its May 1978 meeting the Council regrettably recommended to the House of Delegates, in a supplemental report, that the House concur in the report of the Board of Governors Special Committee, Re: St. Johns County Medical Society and further that the Charter of the St. Johns County Medical Society be revoked effective December 31, 1978. This recommendation was considered in Reference Committee and subsequently on the floor of the House. The House, after deliberation, voted to recommend the Charter of the St. Johns County Medical Society be revoked effective December 31, 1978, unless to the satisfaction of the Judicial Council, the problems involving the membership of the St. Johns County Medical Society were satisfactorily resolved. The Council met formally on two subsequent occasions having given notice to the membership of the St. Johns County Medical Society that this important matter would be considered and that the individual input from the membership would be most important. After carefully reviewing this matter at its August 12, 1978, meeting and November 17, 1978, meeting, the Council voted unanimously that, in its opinion, the difficulties of the St. Johns County Medical Society had not been satisfactorily resolved and that the Charter of the Society be revoked effective December 31, 1978, pursuant to the action of the House of Delegates. Prior to the time that the Charter w actually revoked, each member of the St. Johns County Medical Society was formally notified of this action and of its effect. Each member was notifed of the provisions in the FMA Bylaws that provide for transfers to adjacent component medical societies, and of course, of the impact on medical society sponsored insurance programs. The Judicial Council regrets that this action had to be taken. However, it was the feeling of the Council that it had extended its maximum efforts to this medical society in an attempt to achieve harmony among its membership. Your Council is hopeful that in the coming months the problems in St. Johns County can be resolved and that a unified effort among the physicians in that area will come forth with a request for a new Charter for the St. Johns County Medical Society. In the meantime, your Council has recommended that the St. Johns County be assigned by the House of Delegates to a nearby county medical society for supervision of public health and medical questions that may arise from time to time in St. Johns County.

2. **Professional Advertising — Impact on Existing FMA Ethical Policies.** Your Council has, throughout the last year, reviewed with the Staff the numerous events that have taken place in professional advertising. These include, of course, the decision of the Supreme Court of the United States in Bates v. State Bar of Arizona, the FTC action against the American Medical Association and the rules and regulations regarding physician advertising that have been promulgated by the Board of Medical Examiners. Your Council has reviewed certain FMA ethical policies in light of the changing law in professional advertising. While the Judicial Council has attempted to enforce, through the component medical society, all FMA ethical policies, reality dictates that certain of these policies may have to be altered in order to bring them in accordance with existing legal criteria. Any such change in policy should of course be initiated and completed within the governing processes of this Association.

3. **Proposed Flagler County Medical Society.** Your Council has reviewed a Petition from the requisite number of physicians in the Flagler County area requesting the Florida Medical Association issue a Charter. After careful review of the Petition and the proposed Bylaws and Constitution for the Flagler County Medical Society, the Council has recommended to the Board of Governors that a Charter from the Florida Medical Association be issued. Your Council is mindful that this County Medical Society will be composed of some of the members of the former St. Johns County Medical Society. However, after conferring and meeting with the charter members of the Flagler

Sen. Robert Dole, a candidate for the 1980 Republican presidential nomination, addresses the Annual Auxiliary-FLAMPAC Luncheon.

County Medical Society, the Council is impressed with the candor of the petitioners and their willingness to work toward making the Flagler County Medical Society an outstanding component of the Florida Medical Association.

4. **Proposed Impaired Physician Program.** Pursuant to the instructions of the Board of Governors, the Judicial Council has undertaken to study the general issue of impaired physicians. The Chairman of the Membership and Discipline Committee, Ray Murphy, M.D., has been assigned to research this matter. At the point in time of this report, Dr. Murphy has had numerous discussions with representatives from around the State in regard to the feasibility and content of an impaired physician program to be sponsored by this Association. This is a very delicate matter with many complexities. Dr. Murphy has suggested in order to gain as much input from around the State as possible, that the Florida Medical Association consider sponsoring a statewide meeting in which various speakers could be assembled and input gathered as to the best possible approach to this program. This matter will be taken up in more detail at the next meeting of the Judicial Council and further recommendations will be made to the Board of Governors.

5. **Liaison with the Board of Medical Examiners.** During the past year the Council has maintained a close liaison with the Florida State Board of Medical Examiners. Dr. Robert J. Brennan, a member of this Council, has been assigned as liaison member to the Board of Medical Examiners. Dr. Brennan has reported periodically at the Council meetings information of relevance to organized medicine that relates to the Board of Medical Examiners. This Council is of course aware that during this legislative session, the Florida Legislature under the Sunset law will review the activities of the State Board of Medical Examiners. The Judicial Council has, on numerous occasions, recommended to the Florida Medical Association that through its legislative efforts attempts be made to provide the Board with greater resources in order that it may be better able to handle its increasing workload. This Council, of course, supports the recommendations of the Board of Governors Ad Hoc Committee regarding the Board of Medical Examiners.

6. **Grievances.** During the past year your Council has continued to handle routine grievances that had been presented to it pursuant to the Bylaws of this Association. The Council maintained its procedures of allowing county medical societies to resolve these local grievances and report their findings to the individual directly. The Council, of course, pursuant to the Bylaws of the Florida Medical Association, retains the right to withdraw these grievances from the local society, if they are not acted upon within a reasonable time. Moreover, in matters involving disputes and dissension among members of county medical societies appropriate membership and discipline committees are utilized. Additionally, an individual may appeal a decision of a local County Medical Society Grievance Committee to the Council. This system seems to work efficiently and the Council encourages each county medical society to process and finalize decisions on grievances in an efficient, fair, and expeditious manner. During the course of the year several county societies have requested guidelines as to the fundamental aspects of procedural due process in grievance proceedings involving physician members. In reviewing most of these questions, it has been determined that generally speaking, County Medical Society Bylaws contain the necessary provisions to afford procedural due process to an individual accused of unethical conduct. It is essential that the County Medical Society not disregard the procedural safeguards enacted in their bylaws or Constitution. The basic criteria can be summarized as follows:

A) The charged member should be informed by registered mail of a statement of charges to which he is being asked to respond.

B) The charged member should be given a notice of time and place of a proposed meeting on the charges.

C) The charged individual should be afforded the opportunity to appear in person before the appropriate committee to defend against any of the charges.

7. **Opinions of the Judicial Council.** During the past year the Council has rendered the following opinions:

Opinion 78-1 — A group of physicians may list their group name under a recognized specialty heading, provided however that if a group elects to list in this manner the individual members of the group would not be allowed to list their names under that specialty.

Opinion 78-2 — A member could list in the appropriate specialty headings of two separate and distinct Yellow Page Directories which cover the entire Hillsborough County area.

Opinion 78-3 — In the opinion of the Judicial Council a physician's participation in a second surgical opinion program is not unethical provided that, the program allows the patient reasonable freedom of choice of the physician.

Opinion 78-4 — In the opinion of the Judicial Council it would not be unethical for a physician participating in a second surgical opinion program to subsequently accept patients whom he had seen in conjunction with a second surgical opinion visit as his own, provided the second surgical opinion physician does nothing to influence the free choice of the patient in selecting their physician.

Opinion 78-5 — In the opinion of the Judicial Council a physician may not ethically leave his medical records with a subsequent physician unless the patient has affirmatively authorized the physician to do so.

Opinion 78-6 — A physician may not ethically sell his patients' records to another physician. Further, for the patient's benefit, however, but only with the patient's consent, these records may be transferred to a physician of the patient's choice.

Opinion 78-7 — In the opinion of the Judicial Council it would be unethical for a physician to charge a patient for non-medical services that may be incidental to the patient's being admitted to a hospital.

Opinion 78-8 — It would not be unethical for an Ophthamologist to send practice announcements to an Optometrist.

## Supplemental Report
## Judicial Council

**RECOMMENDATION:**

**RECOMMENDS THAT THE HOUSE OF DELEGATES ADOPT THE FOLLOWING PROPOSED POLICY AS THE FLORIDA MEDICAL ASSOCIATION, INC.'S POLICY STATEMENT RE ADVERTISING:**

**BACKGROUND:**

Recent changes in the law necessitated that certain FMA ethical policies be reviewed to bring these policies in accord with existing law and the evolving ethical considerations. In recommending this policy to the House of Delegates the Judicial Council recognizes that the FMA has consistently advocated the right of physicians to present and the public to receive basic and pertinent information regarding physicians who offer their professional services to the public. The Judicial Council finds no reason to question the ethics of Association members who may wish to provide the public with factual undistorted information. However, those members of the Association who attempt to entice or attract patients by using emotional appeals, unfounded claims, and other distortions should still be subject to disciplinary action for unethical conduct.

## FLORIDA MEDICAL ASSOCIATION, INC. POLICY STATEMENT RE ADVERTISING MAY 1979

### GENERAL:

The FMA recognizes that the public is entitled to, and should have available, legitimate information regarding physicians who offer their professional services to the public. Physicians may furnish legitimate information through various print communications and electronic media, such as, but not limited to: office signs; professional cards; office opening, closing and relocation announcements; telephone directories; radio and television. While such advertising is permitted, physicians are cautioned that use of radio and television are particularly subject to distortion by use of special effects and subliminal devices and are extremely expensive. Physicians, when advertising, should be guided by their interest in facilitating patient access to medical care by providing the public with factual, undistorted information. Accordingly, the FMA finds no reason to question the ethics of its members who may wish to provide the public with factual, undistorted information, including, but not limited to:

a) Name
b) Professional office address(es) and telephone numbers
c) Home address and telephone number(s)
d) Answering service telephone number
e) Office hours
f) Medical Specialty* and recognition by Examining Boards or National Medical Societies
g) Type of Practice (Group or Solo), and affiliation with HMO's, Health Insurance Plans, Government Programs, etc.
h) Hospital affiliation(s)
i) Affiliation(s) with nationally recognized professional associations
j) Educational history, including specialty training
k) The physicians competence with a foreign language

*The FMA endorses the use of the various specialties and subspecialties attached hereto as appendices 1 and 2 for listing by physicians in the yellow pages, but recognizes this list may not be all inclusive. This list may be expanded from time to time by submission from a member of a proposed specialty heading. The Judicial Council will be guided in its consideration of such submission by whether or not such a specialty heading, per se, be deceptive or misleading, or have the capacity or tendency to deceive or mislead.

### ETHICAL CONSIDERATIONS

It shall not be considered unethical for a physician to permit dissemination to the public legitimate, factual and undistorted information in accordance with the policy established herein, regarding the practice of medicine and where and from whom health services may be obtained, so long as such information is in no way fraudulent, false, deceptive or misleading.

Any advertisement, or advertising, shall be deemed to be fraudulent, false, deceptive or misleading if it:

a) Contains testimonials;
b) Is intended or likely to create inflated or unjustified expectations of favorable results;
c) Is self-laudatory or implies that the physician, or groups of physicians, or a specific office, clinic, or center has skills superior to other physicians, offices, clinics or centers;
d) Contains incorrect or incomplete facts or representations or implications that are likely to be misunderstood or be deceiving.

### PREVIOUS FMA POLICIES RESCINDED

This policy supercedes and rescinds the:

a) Policy of the FMA, Inc., Governing the Listing of Members in Telephone Directories (White and Yellow Pages) adopted by the House of Delegates, May 1974, and amended in January 1976 and May 1977.
b) Statewide Standards for Paid Newspaper Announcements by Members of the FMA, Inc., adopted by the House of Delegates, May 1974.

### ENDORSED SPECIALTY LISTING

Aerospace Medicine
Allergy and Immunology
Anatomic Clinical Pathology
Anatomic Pathology
Anesthesiology
Blood Banking
Cardiovascular Disease
Child Neurology
Child Psychiatry
Clinical Pathology
Chemical Pathology
Colon and Rectal Surgery
Dermatology
Dermatopathology
Diagnostic Radiological Physics
Diagnostic Radiology
Endocrinology and Metabolism
Family Practice
Forensic Pathology
Gastroenterology
General Preventive Medicine
Gynecologic Oncology
General Practice
Hematology
Infectious Disease
Internal Medicine
Maternal and Fetal Medicine
Medical Microbiology
Medical Nuclear Physics
Medical Oncology
Neonatal-Perinatal Medicine
Nephrology
Neurological Surgery
Neurology
Neuropathology
Nuclear Medicine
Nuclear Radiology
Obstetrics and Gynecology
Occupational Medicine
Ophthalmology
Orthopedic Surgery
Otolaryngology
Pathology
Pediatrics
Pediatric Cardiology
Pediatric Endocrinology
Pediatric Hematology-Oncology
Pediatric Nephrology
Pediatric Surgery
Physical Medicine & Rehabilitation
Plastic Surgery
Psychiatry
Psychiatry and Neurology
Public Health
Pulmonary Disease
Radiologic Physics
Radioisotopic Pathology
Radiology
Reproductive Endocrinology
Rheumatology
Surgery
Therapeutic Radiological Physics
Therapeutic Radiology
Thoracic Surgery
Urology

### ENDORSED MODIFICATIONS TO SPECIALTY LISTINGS

| FROM: | TO: |
|---|---|
| Anatomic Pathology | Pathology — Anatomical |
| Cardiovascular Disease | Cardiovascular Disease (Heart) |
| Child Neurology | Neurology — Child |
| Child Psychiatry | Psychiatry — Child |
| Colon and Rectal Surgery | Surgery — Colon and Rectal |
| Dermatology | Dermatology (Skin) |
| Dermatopathology | Dermatopathology (Skin Pathology) |
| Endocrinology and Metabolism | Endocrinology and Metabolism (Glandular and Metabolism Disorders) |

| | |
|---|---|
| Gastroenterology | Gastroenterology (Digestive System) |
| Gynecologic Oncology | Gynecologic Oncology (Malignant Diseases of the Female Organs) |
| Hematology | Hematology (Blood) |
| Medical Oncology | Medical Oncology (Malignant) Diseases) |
| Nephrology | Nephrology (Kidneys) |
| Neurological Surgery | Surgery — Neurological |
| Obstetrics and Gynecology | Gynecology and Obstetrics |
| Ophthalmology | Ophthalmology (Eyes) |
| Orthopedic Surgery | Surgery — Orthopedic |
| Otolaryngology | Otolaryngology (Ear, Nose and Throat) |
| Pediatric Surgery | Surgery — Pediatric |
| Plastic Surgery | Surgery — Plastic |
| Surgery | Surgery — General |
| Thoracic Surgery | Surgery — Thoracic |
| Rheumatology | Rheumatology (Arthritis) |

## Report of Council on Specialty Medicine Second Surgical Opinion

The Reference Committee was advised of the Council on Specialty Medicine being on record as opposed to the Judicial Council opinion regarding second surgical opinions.

The motion of the Reference Committee that the item on second opinions in the report of the Council on Specialty Medicine be filed as information carried. (Reference Committee I, page 781)

## RESOLUTION 79-1
### Statewide Impaired Physician Program
### Capital Medical Society

and

## RESOLUTION 79-5
### Statewide Rehabilitation Program for Impaired Physicians
### Sarasota County Medical Society

The Reference Committee considered Resolutions 79-1 and 79-5 jointly because they relate to the same subjects, and offered a substitute resolution.

The motion of the Reference Committee that Substitute Resolution 79-1 be adopted carried.

### SUBSTITUTE RESOLUTION 79-1
#### Statewide Impaired Physician Program

RESOLVED, That the Florida Medical Association House of Delegates charge the Board of Governors of the FMA with the establishment of an on-going statewide impaired physician program.

## RESOLUTION 79-2
### FMA Bylaws Amendment — Delegates and Alternates
### Dade County Medical Association

The Reference Committee moved that Resolution 79-2 be amended and referred to the Board of Governors.

A motion from the floor to table Resolution 79-2 carried.

## Resolution 79-10
### Professional Liability Insurance for EMS Medical Directors
### Palm Beach County Medical Society

The motion of the Reference Committee that Resolution 79-10 not be adopted carried.

## RESOLUTION 79-16
### PSRO

The Reference Committee considered Resolution 79-16 and reviewed current FMA policy as contained in the actions of the House of Delegates of 1977, in Recommendation No. 4 of the Board of Governors. Based on the current FMA policy regarding PSRO participation, the Reference Committee found that Resolution 79-16 was unnecessary.

The motion of the Reference Committee that Resolution 79-16 not be adopted carried.

## RESOLUTION 79-19
### Bylaw Amendment — House of Delegates Policies
### Dade County Medical Association

The motion of the Reference Committee that Resolution 79-19 not be adopted carried.

## RESOLUTION 79-28
### Interim Meeting — House of Delegates
### Hillsborough County Medical Association

The motion of the Reference Committee that Resolution 79-28 not be adopted carried.

The Chairman expressed his appreciation to each member of the Committee for their diligent attention to the business of the House of Delegates. Appreciation was also extended to John E. Thrasher, FMA Legal Counsel; Mr. Ronald G. Cameron, FMA Director of Finance; and Willene Thompson, Recording Secretary for their support of the Committee and to the many members of the Association who attended the meeting and presented testimony.

The motion of the Reference Committee that the Report of Reference Committee No. III be adopted as amended carried.

# AUXILIARY HIGHLIGHTS

The Florida Medical Association Auxiliary held its 51st Annual Meeting concurrently with FMA. Activities included two sessions of the Auxiliary House of Delegates, board meetings, luncheons, receptions, etc. 1, U.S. Sen. Robert Dole of Kansas (standing) chats with Mrs. Richard B. Moore of West Palm Beach and James F. Richards, Jr., M.D., of Orlando, at the Auxiliary-FLAMPAC Luncheon. 2, Mrs. B. David Epstein of Key Biscayne, new Auxiliary President, addresses the Auxiliary House of Delegates. Pictured (left to right): Mrs. Daniel B. Nunn of Jacksonville, Treasurer; Mrs. Roth D. Neller of Clearwater Beach, Recording Secretary; Mrs. Franklin B. McKechnie of Winter park, Parliamentarian; Mrs. Epstein; Mrs. Manuel Bergnes, President of the American Medical Association Auxiliary; Mrs. Fred P. Swing of Charlotte Harbor, President-Elect; and Mrs. Francis C. Coleman of Tampa, First Vice President. 3, Retiring Auxiliary President Mrs. Thomas B. Thames and Dr. Thames (left) of Orlando, and incoming President Mrs. B. David Epstein and Dr. Epstein of Key Biscayne. 4, Mrs. Thames holds a huge key symbolic of the Auxiliary theme, "Keys to Knowledge," while Mrs. Epstein prepares to return to Mrs. Thames the key to her home, which she will be able to enjoy more now that her presidential travels are over. 5, Mrs. Arnold J. Spanjers of Lake Wales, a Past President of the Auxiliary and 1978-79 Program Chairman.

# Report of Reference Committee No. II Public Policy

Dr. Paul A. Tanner Jr., Chairman, and his committee came forward to present the report of Reference Committee No. II, Public Policy

**Report C**
**of the**
**Board of Governors**

The motion of the Reference Committee that the subject of the School Physical Examination Form and Recommendation No. C-3 be referred back to the Board of Governors for further consideration by the Council on Medical Services was carried.

The motion of the Reference Committee that the abbreviation "EMS" be removed and the words "Emergency Medical Services" be inserted to clarify the meaning of the subject in the Board of Governors Report C was carried.

The motion of the Reference Committee that the words "for medically underserved areas" be inserted following the word "conference" on line 48, to clearly indicate the purpose of this acitivity in the Board of Governors Report C was carried.

While considering the Board of Governors Report concerning Allied Health Professions, the Committee heard from Dr. Laurin G. Smith, a member of FMA's Committee on Allied Health Professions, regarding two problems dealing with the writing of prescriptions. Florida law requires:

1. If a prescription is written on a blank which does **not** have the name of the prescriber printed at the top, such as hospital prescription blanks, the prescriber must **print** his name under his signature at the bottom.
2. Prescriptions for controlled substances (scheduled drugs) must be written on a single prescription blank, with no other substance prescribed on the same prescription form.

The Florida Pharmaceutical Association has notified the FMA on a number of occasions that these two regulations are not being adhered to in many instances, creating a significant problem for pharmacists in Florida.

The motion of the Reference Committee that the subject of improper prescription writing be referred to the Board of Governors for publication in appropriate FMA communications was carried.

The motion of the Reference Committee that Report C of the Board of Governors be adopted as amended carried.

**Reference Committee II dealt with public policy. Left to right: Jerome Benson, M.D., Miami Beach; Herbert E. Brooks, M.D., Bonifay; Roy E. Campbell, M.D., Palatka; William C. Hartley, M.D., Hollywood; Mrs. Irene Schumtz, Jacksonville, Recorder; and Paul A. Tanner Jr., M.D., Auburndale, Chairman.**

## Report C
## of the
## Board of Governors
O. William Davenport, M.D., Chairman

### 1978 House of Delegates Referrals

**Unwanted Adolescent Pregnancies** — The House of Delegates at its meeting in 1978 observed in the report of the Committee on School Health that there exists a major problem in the state of unwanted adolescent pregnancies. This problem was referred to the Board of Governors for consideration and recommendations by the Committee on School Health.

The Committee on School Health and the Committee on Public Health considered this subject at meetings during the year at which time it was learned that a new organization entitled "Florida Alliance for Responsible Adolescent Parenting" had been established. Membership included the National Foundation-March of Dimes, Department of Education, Department of HRS, and a large number of homes for pregnant adolescents. The Committee recommended that the FMA send a representative to participate in the activities of this organization to evaluate the desirability of the FMA officially joining.

The Board authorized a member of the Committee on School Health to represent the FMA at meetings of the Alliance for a period of six months to determine if the FMA should formally join this organization.

The House of Delegates at its meeting in 1978 requested that the subject of chiropractors doing pre-athletic physicals and serving as team physicians be referred to the Board of Governors for review and recommendations by the Committees on Sports Medicine and School Health.

This subject is currently under study and efforts are being made by review of the Chiropractic Practice Act to delineate what a team physician must be capable of performing as compared to what chiropractors are allowed to perform under their Practice Act. A similar analysis is under way with regard to pre-athletic physical examinations.

### FMA Councils and Committees

### COUNCIL ON SPECIALTY MEDICINE

**Insect Sting Kits** — The Board reviewed the Council's report expressing support for the position of the National Institutes of Health (NIH) that anaphylactic sting kits should not be sold over-the-counter.

#### RECOMMENDATION NO. C-1

**THAT THE FMA ADOPT THE POLICY THAT ANAPHYLACTIC STING KITS SHOULD ONLY BE AVAILABLE THROUGH PRESCRIPTION AND NOT SOLD OVER-THE-COUNTER.**

### COUNCIL ON MEDICAL SERVICES

**TB Testing of School Personnel** — The Council has recommended that current FMA policy regarding TB Testing of school personnel be changed. The former position on testing of school personnel for tuberculosis required that all personnel be tested on an annual basis. Following the publication of that position, the Committee received a number of protests from teacher groups and the Office of Tuberculosis Control, Department of HRS. These groups did not feel it is necessary to test on an annual basis.

The Committee on School Health then sought the advice of the Florida Thoracic Society, Florida Lung Association and the FMA's Council on Specialty Medicine. These three groups and the TB Control Office plus the Council for Disease Control agreed that annual testing is not necessary because the risk factor is so low that it doesn't justify the expense involved.

#### RECOMMENDATION NO. C-2

**THAT THE FMA NOTIFY THE DEPARTMENT OF EDUCATION AND THE HEALTH PROGRAM OFFICE OF THE DEPARTMENT OF HRS THAT IT HAS CHANGED ITS PREVIOUS POSITION WITH REGARD TO TUBERCULOSIS TESTING OF SCHOOL PERSONNEL AND NOW RECOMMENDS:**

> **SCHOOL PERSONNEL SHOULD BE SCREENED FOR TUBERCULOSIS ON INITIAL EMPLOYMENT BY TUBERCULIN SKIN TESTING. PERSONNEL CURRENTLY EMPLOYED SHOULD BE TESTED IF THERE IS NO RECORD OF A PREVIOUS TEST. REACTORS SHOULD BE EXAMINED BY A 14 x 17 CHEST X-RAY AND SHOULD CONSULT WITH THEIR PHYSICIAN REGARDING THE ADVISABILITY OF ISONIAZID PREVENTIVE THERAPY. IF PREVENTIVE THERAPY IS COMPLETED, NO FURTHER SCREENING IS REQUIRED; IF NOT COMPLETED, A CHEST X-RAY SHOULD BE REQUIRED AT LEAST ANNUALLY. NONREACTORS NEED NO FURTHER SCREENING EXCEPT WHEN CIRCUMSTANCES INDICATE A HIGHER RISK OF ACQUIRING INFECTION SUCH AS KNOWN EXPOSURE AND IN CERTAIN HIGH RISK AREAS.**

**School Physical Examination Form** — (Referred to the Board of Governors ) — For over a year both the FMA committees on School Health and Sports Medicine have been trying to develop a school physical examination form that could be utilized as both a preschool and athletic physical.

#### RECOMMENDATION NO. C-3

**THAT THE FMA ENDORSE THE SCHOOL PHYSICAL EXAMINATION FORM PROPOSED BY THE FMA COMMITTEES ON SCHOOL HEALTH AND SPORTS MEDICINE, WHICH IS INCLUDED IN THE DELEGATES' PACKETS.**

**Childhood Cancer** — The Board reviewed the project at the University of Florida for classroom management of childhood cancer. This project is part of the State childhood cancer program, and specifically addresses the student suffering from Leukemia. It provides a more open system of communication among patients, parents, educators, and health professionals through the use of audio visuals. The purpose of the project is to keep the student-patient in a normal classroom environment. Due to the apparent increase in the number of cases of leukemia in school age children and because of the advances in the treatment of such cases, which has provided longer life expectancy, the Council has recommended that this project be endorsed by the FMA.

## RECOMMENDATION NO. C-4

THAT THE FMA ENDORSE THE "STATE COMPREHENSIVE CHILDHOOD CANCER PROGRAM FOR CLASSROOM MANAGEMENT OF CHILDHOOD CANCER", AND FURTHER

THAT THE FMA RECOMMEND TO THE DEPARTMENT OF EDUCATION AND HEALTH PROGRAM OFFICE, DEPARTMENT OF HRS, THAT INFORMATION ON THIS PROJECT SHOULD BE DISTRIBUTED TO ALL SCHOOL DISTRICTS IN FLORIDA.

**Insect Sting Kits** — The Board concurred that children who are allergic to insect stings must receive immediate injections of Epinephrine and, therefore, an exception should be made to allow appropriate school personnel to give injections of medications for this type of condition.

## RECOMMENDATION NO. C-5

THAT THE FMA NOTIFY THE DEPARTMENT OF EDUCATION AND THE HEALTH PROGRAM OFFICE, DEPARTMENT OF HRS, THAT SCHOOL PERSONNEL SHOULD BE ALLOWED TO ADMINISTER INJECTIONS OF EPINEPHRINE IN THE EVENT OF AN INSECT STING TO A CHILD WHO IS SERIOUSLY ALLERGIC, PROVIDED THE FOLLOWING CONDITIONS HAVE BEEN MET:

1. THE CHILD'S PARENTS HAVE DESIGNATED THE APPROPRIATE SCHOOL PERSONNEL;
2. THE CHILD'S PHYSICIAN HAS GIVEN HIS PRIOR APPROVAL TO THE USE OF AN INSECT STING KIT BY THE DESIGNATED SCHOOL PERSONNEL;
3. DESIGNATED PERSONNEL HAVE RECEIVED TRAINING IN THE USE OF AN INSECT STING KIT.

**McDonald's immunization Program** — The Board approved FMA endorsement and support for McDonald's Immunization Program. The campaign would be aimed at improving immunizations in the populations from birth through four years of age where recent surveys have shown that there are sizeable numbers of children with no or incomplete immunizations. More than one third of the 500,000 children in this age group need vaccine.

The plan provided that certificate forms be placed in physicians' offices and health department clinics so that children who have up to date vaccine records or children who receive vaccine during the month of October could have these certificates validated. Once validated, the children would be able to receive a premium (a hamburger) at McDonald's. The campaign kick-off would be scheduled for October 2, 1978, (National Child Health Day) but the certificate would be valid and redeemable through the end of the year.

If this initial effort proves successful in improving childhood immunizations, McDonald's has indicated an interest in making this campaign an annual program. Other states have had successful programs with similar approaches.

**HEW "Recall" Program** — The Board approved in principle HEW's "Recall" Immunization Program. "Recall" was a National Childhood Immunization Initiative which has a goal of assuring the adequate immunization of 90 percent of the children under 15 by October 1979.

The program recognized and supported the fact that a large number of parents depend upon a family physician or pediatrician for health care. The intent of the Initiative was to encourage families to visit their own physician to complete needed immunization. The program also sought to put into place a system which will assure the early and adequate immunization of newborns. State and local health departments will be developing "Recall" activities in order to assure that those infants who begin immunizations in public clinics will follow through with a complete program.

**Institute of Medicine** — The Board approved in principle the planned "Institute of Medicine" study on the role of barbiturates in current medical practice, and requested additional information with regard to the survey questionnaire and method of interpretation. The Board also suggested the participation of more private practicing physicians on the study advisory committee.

**Amphetamines and Methaqualone Rule** — Requested the State Board of Medical Examiners to consider adopting a rule on the use of amphetamines and methaqualone. During the 1978 legislative session a bill was filed relating to the use of amphetamines. In testimony before the Senate HRS Committee, FMA witnesses acknowledged that the bill is similar to the program adopted by the Duval County Medical Society and endorsed by the FMA, but suggested it would be unwise to place such approved uses in statutory form since any additions or deletions, based on scientific experience, could only come about through statutory changes. The legislation was deferred, but FMA was requested to petition the SBME to adopt a rule regarding approved uses of amphetamines.

**Patient Identification Information** — Expressed opposition to any regulations that would require the release of patient identification information in connection with mental health or drug abuse programs.

**Rural Health Clearing House** — Approved in principle the concept of a privately funded rural health clearing house for recruiting physicians to medically under-served areas.

**State Health Plan** — Requested that the Department of Health and Rehabilitative Services send copies of any future proposed "State Health Plan" to the FMA and its component county medical societies for their review and comment prior to adoption and publication.

**Medical Care in Prisons and Jails** — Authorized, subject to appropriate budgetary controls, appointment of a Task Force consisting of physicians in Florida who have expertise in the field of prison and jail medical care, for the purpose of working with the Committee on Public Health in submitting a comprehensive recommendation regarding this subject.

**Home Births** — Requested the cooperation of private practicing physicians in reporting to County Health Departments any births that were not attended by a professional.

In 1973, most counties in Florida reported approximately 99% of all births took place in hospitals. However, 1977 data shows some major counties now only have an 85% ratio of hospital births. During 1977, there were over 5,000 births reported in Florida with no professional in attendance and there is reason to believe there were many more.

**Rubella and Measles Control** — Endorsed the Rubella and Measles Control Program and directed that this program be publicized through all appropriate FMA communications.

The incidence of measles in Florida has increased at an alarming rate of about 400% during 1978. A total of 1,147 cases had been reported for the year as of December 31, 1978, in contrast to 308 for all of 1977. Sixty-eight percent of the measles cases reported have been in persons ten to nineteen years of age, with an additional five percent in those twenty and older. The average age was fourteen.

**School of Public Health** — Endorsed the establishment of a School of Public Health at the University of Miami.

**State Emergency Medical Services Program** — Authorized FMA representatives to contact the Secretary of HRS for the purpose of discussing the feasibility of contracting with the Florida Medical Foundation for the Administration of the State Emergency Medical Services Program.

**State CPR Program** — Authorized subject to appropriate budgetary controls appointment of a Cardiopulmonary Resuscitation

Task Force consisting of representatives from the Florida Medical Association's Committee on EMS; American Heart Association, Florida Affiliate; American Red Cross, Florida Chapter; Department of Education; and Department of HRS, for the purpose of developing a state plan to train the public in basic life support techniques (CPR).

Presently there are several organizations in the state which offer instructions in basic life support techniques but there is very little coordination of these activities and no comprehensive state plan for training the public. Studies have clearly indicated such a program would save many lives.

**Athletic Policies in Local Schools** — Requested county medical society support for implementing FMA approved athletic policies in local schools.

**Florida Community Health Center** — Recommended to the St. Lucie-Okeechobee County Medical Society that they should **participate** in a challenge of the federal medically underserved designation for the Okeechobee area by petitioning the local HSA to review the designation as required annually by federal regulations; and further that the FMA provide appropriate available staff assistance to the St. Lucie-Okeechobee County Medical Society may need in making such a challenge.

**Physician Recruitment Conference** — Approved FMA sponsorship of a 4th Physician Recruitment Conference for medically underserved areas in October, 1979, and that the Florida Academy of Family Physicians and the Health Program Office, Department of HRS, be invited to co-sponsor the conference.

**Therapies for Pain and Discomfort** — Expressed support of legitimate double-blind studies involving therapeutic uses of such drugs as heroin and marijuana for the reduction of pain and discomfort experienced by the terminally ill.

**Day Care Center Immunizations** — Adopted a policy that day care center clients should be properly immunized or involved in an active immunization program.

There is concern about the lack of enforcement of immunization regulations for Day Care Center clients. The law requires that these children be immunized or involved in an active immunization program.

**Tuberculosis Screening** — Notified the Department of Education and the Health Program Office of the Department of HRS that the FMA's position on tuberculosis screening of day care center personnel and school students is as follows:

1. **Day Care Center Personnel**

   Personnel of day care centers should be screened for tuberculosis in the same manner as that which FMA has recommended for school personnel.

2. **School Students**

   Students entering school for the first time and upon admission to the seventh grade should be screened through the use of tuberculin skin test.

## FMA Councils and Committees

### Committee on Allied Health Professions

**Florida Occupational Therapy Association** — Extended FMA recognition to the Florida Occupational Therapy Association as an official recognized Allied Health Profession.

**Nurse Practice Act** — Received a report regarding additional functions of Advanced Nurse Practitioners. The Joint Advisory Committee to the Board of Nursing has never come to any agreement on "additional functions" for Advanced Nurse Practitioners that were acceptable to the Board of Nursing. Therefore, the Board of Nursing has decided not to promulgate any rules on additional functions. At their last meeting the Board of Nursing indicated they will seek further revisions to the Nurse Practice Act during the 1979 session of the Legislature. These changes would include the abolishment of the Joint Advisory Committee, and provisions to allow Advanced Nurse Practitioners to prescribe medications from a limited formulary.

**Physician Extender** — Supported a revision to the Medical Practice Act that would create a Physician Extender Clause to regulate both Advanced Nurse Practitioners and Physician's Assistants similar to the present clause regulating only Physician's Assistants (458.135) requiring that a physician must obtain a certificate for the extender and may only obtain a certificate for a maximum of two extenders, and referred this to the Council on Legislation and Regulations.

**Physician's Assistants** — Recently, representatives of the Florida Academy of Physician's Assistants requested a special meeting with the Committee on Allied Health Professions to discuss both drug prescribing roles for Physician's Assistants and some form of hospital medical staff affiliation.

The Committee informed the Academy's representatives that they would not endorse even limited prescribing by a Physician's Assistant. On the subject of hospital privileges, the Academy's representatives were given a copy of FMA's position statement on hospital privileges which states, "that Allied Health Professions should be considered for some form of medical staff affiliation which would allow them to come in on the basis of a medical staff request".

### Committee on Voluntary Health Agencies

**1978 Charitable Solicitations Act** — Reviewed a synopsis of the new Charitable Solicitations Act. Representatives from the various agencies felt this legislation is a more realistic approach to regulating charitable solicitations. It provides flexibility with regard to new agencies trying to get established, while maintaining the necessary enforcement provisions to prevent criminal activity or abuse. The 25% administrative cost cap was removed from the statute, but will be addressed in the rules and regulations. FMA will monitor the writing of the rules and regulations closely to insure that the intent of the new law is carried out. VHA representatives were informed that the FMA would be opposed to extremely liberal regulations on administrative costs, even for new agencies, but would support a rule that provided flexibility.

**Communication** — Noted the desire of the Committee to help keep physicians better informed on VHA programs. The Committee is planning to submit articles to the *Journal* whenever an agency changes direction or initiates a new program that would be of interest.

**Recognition Program** — Approved renewal of recognition for the following Voluntary Health Agencies.

- Florida Chapter, Arthritis Foundation
- Florida Division, Leukemia Society of America
- American Heart Association, Florida Affiliate, Inc.
- American Cancer Society, Inc., Florida Division
- The National Foundation — March of Dimes
- Easter Seal Society for Crippled Children and Adults of Florida, Inc.
- Mental Health Association of Florida, Inc.
- Florida Society to Prevent Blindness
- Florida Coordinating Council of the National Kidney Foundation
- Florida Lung Association

The Board also granted provisional recognition to the American Diabetes Association, Florida Chapter and tentative recognition to:

- United Cerebral Palsy of Florida, Inc.
- National Multiple Sclerosis Society of the State of Florida
- Florida Association for Retarded Citizens
- Florida Epilepsy Foundation, Inc.

## Report of Council on Specialty Medicine Insect Sting Kits

By approving the item in the Board of Governors Report C, concerning Insect Sting Kits, the Reference Committee believes that the FMA position on this matter has been established.

The motion of the Reference Committee that the item on Insect Sting Kits from the report of the Council on Specialty Medicine be filed as information carried.

## Report of the Committee on Allied Health Professions

The motion of the Reference Committee that the report of the Committee on Allied Health Professions be adopted as printed in the Handbook carried.

### Committee on Allied Health Professions

Luis M. Perez, M.D., Chairman

During the past year, the Committee on Allied Health Professions held two meetings in Orlando: on August 25, 1978, and February 23, 1979. Both meetings included joint sessions with representatives of the following FMA recognized allied health professions:

1. Florida Dental Association
2. American Association of Medical Assistants, Florida State Society
3. Florida Dietetic Association
4. Florida Society of Medical Technologists
5. Florida Nurses Association
6. Florida Association of Dispensing Opticians
7. Florida Pharmaceutical Association
8. Florida Chapter, American Physical Therapy Association
9. Florida Podiatry Association
10. Florida Society of Radiologic Technologists
11. Florida Veterinary Medical Association
12. Florida Society for Respiratory Therapy
13. Florida Academy of Physician's Assistants
14. Florida Occupational Therapy Association

During this Association year, the Florida Occupational Therapy Association obtained formal FMA recognition and the Committee is presently reviewing a recognition application from the Florida Cardiopulmonary Association.

The Committee continues to closely monitor the promulgation of any rules and regulations for advanced nurse practitioners and the filing of proposed legislation to amend the Nurse Practice Act.

Most of the allied health profession groups in Florida joined with the FMA in supporting Revision I to Florida's Constitution, which would have established a separate department of health. Even though the Revision did not pass, these groups have remained active in the Florida Alliance for Health, which continues to pursue the goal of establishing a separate department of health.

At the last Committee meeting, allied health profession representatives indicated their concern over the ongoing sunset review process and the importance of maintaining the integrity of the various health boards.

## Report of the Committee on Voluntary Health Agencies

The motion of the Reference Committee that the report of the Committee on Voluntary Health Agencies be adopted carried.

### Committee on Voluntary Health Agencies

Robert C. Palmer Jr., M.D., Chairman

During the past year, the Committee on Voluntary Health Agencies held two meetings: in Tampa, on August 31, 1978, and in Tallahassee, on March 9, 1979. Representatives of the various VHA's attended these meetings and reported on the activities and concerns of their organizations.

In the 1978-79 Association year, fourteen voluntary health agencies were recognized by the FMA:

1. Florida Chapter, Arthritis Foundation
2. Florida Division, Leukemia Society of America
3. American Heart Association, Florida Affiliate
4. Florida Division, American Cancer Society, Inc.
5. Florida Epilepsy Foundation, Inc.
6. Florida Coordinating Council of the National Kidney Foundation
7. Florida Association for Retarded Citizens
8. The National Foundation — March of Dimes
9. Florida Lung Association
10. United Cerebral Palsy of Florida, Inc.
11. Easter Seal Society for Crippled Children and Adults of Florida, Inc.
12. National Multiple Sclerosis Society, Southeast Region
13. Mental Health Association of Florida, Inc.
14. Florida Society to Prevent Blindness

Presently, the Committee is completing the review of applications for the 1979-80 recognition program. The American Diabetes Association, Florida Chapter, submitted its first application for formal recognition. This year the Committee has noted significant improvement by a number of voluntary health agencies in meeting such recognition criteria as medical representation on boards and controlling administrative costs. Most applications continue to demonstrate excellent programs in patient services, and professional and public education.

During the 1978 legislative session, a new Charitable Solicitation Act was passed, which provides a more realistic approach in regulating VHA's. It also contains more flexibility for new agencies trying to get established. The Committee is monitoring the promulgation of rules and regulations for the new law.

During meetings this year, representatives of voluntary health agencies indicated that a major concern of their organizations is the apparent decline in physician participation in volunteer programs. The Committee has already initiated a study of this subject.

## Report of the Council on Medical Services

The Reference Committee congratulated Dr. Joseph T. Ostroski, Chairman of the Council on Medical Services, for his excellent and well-organized report and applauded him and the involved committee chairmen for their services to the Association and to Florida's citizens during the past year.

While reviewing the activities of the Committee on Public Health, the Committee regretfully learned of the recent resignation of the State Health Officer, Dr. E. Charlton Prather. Following this announcement, there were many requests from members in attendance that the FMA reiterate its support for a separate Department of Health, with which the Reference Committee agreed.

The motion of the Reference Committee that the FMA reiterate its position of support for a separate Department of Health carried.

The motion of the Reference Committee that the report of the Council on Medical Services be adopted carried.

## Council on Medical Services

Joseph T. Ostroski, M.D., Chairman

During this reporting period, the Council on Medical Services held two meetings: on September 16, 1978, in Tampa, and March 25, 1979, in Tampa. All six Committees that serve under the Council have been active as during the year the Council forwarded thirty-four (34) recommendations for consideration by the Board of Governors. They appear in the report of the latter body. The following is a consolidated report of each Committee's activities for the year:

The **Committee on Public Health** became the Council's most active Committee by addressing a large number of public health issues. The Committee held three formal meetings and had one joint meeting with the Committee on HSA's for the purpose of discussing HSA activity in public health programs.

The Committee reviewed and made recommendations on such subjects as the state immunization program, state health plan, licensure of birth centers and reporting home births, prison and jail medical care, establishing a School of Public Health at the University of Miami, and public health legislative proposals by the Department of Health and Rehabilitative Services.

Other subjects that were studied by the Committee include hospice services, recent revisions to the state premarital law, the epidemic of adolescent pregnancies, medicaid program, and home health care agencies.

The Committee has established a working relationship with the Health Program Office of the Department of HRS, as the State Health Officer, Dr. E. Charlton Prather, and members of his staff attend Committee meetings.

The **Committee on School Health** continues to serve as the official state School Health Medical Advisory Committee to the Department of Education and the Health Program Office of the Department of Health and Rehabilitative Services.

During the past year, three meetings were held and the Committee made recommendations concerning state immunization programs, school physical examinations, child abuse, adolescent pregnancy, tuberculosis screening, comprehensive health education, and medical referrals by teachers.

Other subjects considered included the drafting of a Flip-Chart for School Emergencies, utilization of insect sting kits by designated school personnel, and classroom management of childhood cancer.

The **Committee on Rural Health** planned and conducted FMA's third Physician Recruitment Conference for rural and medically underserved communities and physicians seeking practicing opportunities. The Conference, held on January 20, 1979, in Tampa, was well attended and received excellent press coverage.

During the past year, the Committee held three meetings and studied such subjects as medically underserved designation by HEW, the Community Hospital Education Council's Florida Physician Distribution Report, how to make CME courses more accessible to rural physicians, a private rural health clearing house to recruit

**Eighteen past presidents of the Florida Medical Association gathered during the Annual Meeting for their annual breakfast and shop talk. Front row (left to right): Jere W. Annis, M.D., Lakeland (1958); Leo M. Wachtel, M.D., Jacksonville (1960); Walter C. Jones, M.D., Miami (1941); Warren W. Quillian, M.D., Coral Gables (1963); Ralph W. Jack, M.D., Miami (1959); and Jack Q. Cleveland, M.D., Coral Gables (1968). Standing: James T. Cook, M.D., Marianna (1970); Louis C. Murray, M.D., Orlando (1977); Floyd K. Hurt, M.D., Jacksonville (1971); Joseph C. Von Thron, M.D., Cocoa Beach (1973); Henry J. Babers Jr., M.D., Gainesville (1969); George S. Palmer, M.D., Tallahassee (1966); H. Phillip Hampton, M.D., Tampa (1965); W. Dean Steward, M.D., Marianna (1967); Jack A. MaCris, M.D., St. Petersburg (1976); Samuel M. Day, M.D., Jacksonville (1964); Vernon B. Astler, M.D., Boynton Beach (1975); and William J. Dean, M.D., St. Petersburg (1972).**

physicians to medically underserved areas, and FMA participation on the Florida Committee on Rural Health.

The Committee also prepared and distributed a rural physicians survey to determine the needs and problems of rural physicians in Florida. The response to the survey was good and the Committee is presently tabulating and analyzing the results. A summary of this study will be submitted to the FMA *Journal* for future publication.

The **Committee on Emergency Medical Services and Emergency Communications** activities remain an FMA priority. This year, the Committee devoted a major part of their efforts to the development and distribution of a Critical Care Survey for determining the availability of emergency, critical care, and other highly specialized facilities in Florida. The purpose of this project is to aid the Committee in their continuing study of critical care.

The Committee held three meetings during the year, and considered such topics as emergency room cost containment, how to reduce accidents involving rescue vehicles, having emergency information published in telephone books, the availability of professional liability insurance for EMS medical directors, developing a state CPR program for training the public in basic life support techniques, and the promulgation of rules and regulations for paramedics.

The **Committee on Drug Abuse** held three meetings during this Association year, and made recommendations concerning the confidentiality of patient identification information in connection with mental health or drug abuse programs, the need for a study on the role of barbiturates in current medical practice, support of legitimate double-blind studies involving therapeutic uses of such drugs as heroin and marijuana for reduction of pain and discomfort experienced by the terminally ill, and petitioning the Board of Medical Examiners to consider adopting a rule on the use of amphetamines and methaqualone.

Other subjects considered included the potential proliferation of methadone clinics, updating the Physicians Desk Reference on Drug Abuse, and the Committee is presently studying the availability of drug abuse treatment programs in Florida's prisons.

The **Committee on Sports Medicine** continued their study on how to implement an athletic trainer program for junior and senior high schools in Florida. The Committee is convinced such a program would reduce school athletic injuries and significantly improve the care of the injured athlete. Funding remains the major obstacle to the development of a program.

During the past Association year, the Committee held two meetings and made recommendations concerning the necessity of annual athletic physicals, revisions to the athletic physical examination form, keeping county medical societies better informed on FMA athletic policies, and the development of a public relations film on physical fitness.

Other subjects considered during the year included the use of non-professionals as team physicians, planning for a statewide Sports Medicine Conference, and the development of a comprehensive position paper on the medical problems associated with school athletic programs in Florida.

## RESOLUTION 79-8
## Generic Drugs
## Dade County Medical Association

The motion of the Reference Committee that Resolution 79-8 be adopted carried.

### RESOLUTION 79-8
### Generic Drugs

RESOLVED, That the FMA take appropriate action to assure that all generic drugs have identification codes, and be it further

RESOLVED, That the FMA encourage the distribution of a generic formulary to physicians with a product identification section similar to the PDR.

## RESOLUTION 79-13
## Florida Vocational Rehabilitation Program
## Escambia County Medical Society

The motion of the Reference Committee that Resolution 79-13 be adopted carried.

### RESOLUTION 79-13
### Florida Vocational Rehabilitation Program

RESOLVED, That the Florida Medical Association urges the Governor to reconsider his decision regarding Vocational Rehabilitation in the State of Florida and exercise positive leadership to assure undistrupted continuation of Vocational Rehabilitation within the State government.

## RESOLUTION 79-14
## Transfer of Burn Patients
## Brevard County Medical Society

The Reference Committee noted that the subject of Resolution 79-14 was already under study by the Council on Medical Services.

The motion of the Reference Committee that Resolution 79-14 be referred to the Board of Governors for consideration by the Council on Medical Services carried.

### RESOLUTION 79-14
### Transfer of Burn Patients
### Brevard County Medical Society

(Not Adopted — Referred to the Board of Governors)

Whereas, In the past there has been on occasion difficulty transferring seriously burned children to a State Burn Center from outlying hospitals because of financial prerequisites, and

Whereas, Brevard County Medical Society believes that the Florida Medical Association could be instrumental in arranging for prompt and expeditious transfer for such seriously burned or injured patients who require specialized treatment, therefore be it

RESOLVED, That the FMA house of Delegates charge the FMA Board of Governors with the task of establishing a mechanism to enable all Florida hospitals to expedite prompt transfer of burn patients and other similar emergency conditions requiring treatment in specialized centers, without delay or consideration of finances or remuneration.

## RESOLUTION 79-26
## Tuberculin Skin Testing of Adults
## Dick L. Van Eldik, M.D., Delegate

The motion of the Reference Committee that Resolution 79-26 be adopted carried.

**RESOLUTION 79-26**
**Tuberculin Skin Testing of Adults**

RESOLVED, To encourage increased utilization of the tuberculin skin test as a routine examination procedure for the detection of tuberculous infection in adults prior to the onset of active disease, and to recommend that those found to be infected either be given preventive drug therapy or evaluated periodically.

## RESOLUTION 79-27
## Tuberculin Skin Testing in Jails
## Dick L. Van Eldik, M.D., Delegate

The motion from the floor that Resolution 79-27 be referred to the Board of Governors carried.

**RESOLUTION 79-27**
**Tuberculin Skin Testing in Jails**
**Dick L. Van Eldik, M.D., Delegate**
(Not Adopted — Referred to the Board of Governors)

Whereas, Tuberculosis is on the increase in Florida and appears to have ceased to decline in the United States; and

Whereas, More than fourteen percent of inmates newly admitted to the Florida State prison system have been found to have a tuberculous infection and most have been incarcerated in county jails prior to admission; and

Whereas, These new inmates number more than seven thousand per year, average 26 years of age, and constitute a large reservoir of tuberculosis for the future, therefore be it

RESOLVED, To encourage the use of the tuberculin skin test as a routine procedure in county jails to detect tuberculosis in all prisoners held in custody sufficiently long to permit an intradermal skin test for tuberculosis to be performed and to take a chest x-ray on all infected individuals.

The Reference Committee expressed its appreciation to all members of the Association who appeared at the meeting to provide guidance and counsel.

Special thanks were conveyed to Dr. Rufus K. Broadaway and Dr. Eugene G. Peek who represented the AMA delegates at the meeting of the Reference Committee. Appreciation was extended to all members of the Committee for rendering their knowledge and expertise.

The Reference Committee also thanked FMA staff members Mrs. Irene Schmutz, Recording Secretary, and Mr. Robert J. Harvey, Director of Medical Services for their assistance in the preparation of their report.

The Reference Committee expressed thanks to the Speaker and the Vice Speaker for their trust and confidence in appointing each of them to the Committee.

The motion that the Report of Reference Committee No. II be adopted as amended carried.

Incoming President Richard S. Hodes, M.D., presents the official portrait of retiring President O. William Davenport, M.D., to Mrs. Davenport.

# Report of Reference Committee No. I Health and Education

Dr. Richard C. Clay, Chairman, and his committee came forward to present the report of Reference Committee No. I, Health and Education

**Report B**
**of the**
**Board of Governors**

The motion of the Reference Committee that the Board of Governors Report B be adopted as printed in the Handbook with the corrections made at the First House of Delegates carried.

**Report B**
**of the**
**Board of Governors**

O. William Davenport, M.D., Chairman

**Board Actions of Major Importance**

**Governor's Council on Physical Fitness** — Supported in principle a proposal of the Governor's Council on Physical Fitness for a program of physical fitness seminars for senior citizens and advised county medical societies of this action in the event that they may wish to participate.

**CME Reporting Form** — The Board of Governors considered a recommendtion to amend the criteria for the CME program to provide that the CME reporting form not be sent to physicians on an annual basis but that it be sent every three years. The Committee on CME had reviewed the actions of the Board and felt that some reminder should be sent and suggested that a CME Reporting Reminder be included in the Annual Meeting *Brief* or other appropriate publication annually. Subsequently, the Board authorized that a CME reminder to the membership be included with FMA *Briefs* or other Association newsletter on an annual basis.

**RECOMMENDATION NO. B-1**

**THAT THE HOUSE OF DELEGATES AMEND THE CRITERIA FOR THE FMA CONTINUING EDUCATION PROGRAM TO PROVIDE FOR THE MAILING OF CME REPORTING FORMS AS INDICATED WITH APPROPRIATE ADVANCE NOTICE AND, FURTHER, THAT ANY LEGISLATION REGARDING MANDATORY CME REQUIREMENTS INCLUDE CRITERIA COMPARABLE WITH THE FMA CME REQUIREMENTS.**

**FMA Councils and Committees**

**COUNCIL ON SCIENTIFIC ACTIVITIES**

**Scientific Speakers Registry** — The Board authorized a Registry of Scientific Speakers to assist county medical societies, hospitals, specialty groups, and others in arranging scientific programs. This program is being implemented by the Florida Medical Foundation Committee on Medical Education. Speakers included on the registry are approved by the Association's Council on Scientific Activities.

Richard C. Clay, M.D., of Miami (standing), presided over Reference Committee I, which considered matters related to Health and Education. Others pictured (left to right): Arthur L. Eberly, M.D., Lighthouse Point; Mrs. Cindy Kelly, Jacksonville, Recorder; Thomas D. Bartley, M.D., Gainesville; H. Quillian Jones, M.D., Fort Myers; and Louis E. Cimino, M.D., Tampa.

**1978 Annual Meeting Scientific Program** — The Board commended Drs. Henry M. Yonge and Maurice H. Laszlo for their outstanding work on the 1978 Annual Meeting Scientific Program which enabled physicians to earn up to 20 hours CME mandatory credit.

**1979 Annual Meeting Scientific Program** — The Board approved "Nutrition" as the theme for the 1979 Annual Meeting and approved the scientific program presented by Yank D. Coble, M.D., which will allow physicians to earn 20 hours of CME mandatory credit. The scientific program will feature special sections on Nutrition on Wednesday, Thursday, Friday and Saturday. In addition, each of the 38 FMA recognized specialty groups co-sponsoring scientific sections were requested to include nutrition in their programs.

**Allied Health Professions** — The Board authorized members of the appropriate allied health professions to attend the special nutrition program, provided they are pre-registered.

**Lederle Laboratories** — The Board authorized Lederle Laboratories, who had made significant financial contributions as a co-sponsor for the nutrition portion of the 1979 scientific program, to reprint and distribute in Florida the nutrition portion of the program in order to stimulate attendance and allow for pre-registration.

**FMA Journal** — The Board commended the Editor, Gerold L. Schiebler, M.D., and the staff of *The Journal of the Florida Medical Association* for the continued excellence of the *Journal*, and particularly for the Florida Magazine Association Best Special Issue Award and their involvement of students in editorial capacities. Your chairman wishes to express personal appreciation to Dr. Schiebler for his talents and ability in successfully combining the scientific and organizational activities in the state.

**Student *Journal* Editors** — In view of the high degree of success with the involvement of student editors of the *Journal*, the Board agreed to consider the appointment of student FMA members to other committees of the Association, as appropriate.

**Principles of Advertising** — The Board reviewed the proposed principles of advertising for the *Journal* of the FMA.

### RECOMMENDATION NO. B-2

**THAT THE PROPOSED PRINCIPLES OF ADVERTISING FOR *THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION* BE APPROVED AS INCLUDED IN THE DELEGATES' PACKETS.**

**CME Appeal and Suspension Procedures** — The policy and procedures governing FMA's mandatory continuing medical education program as adopted by the House of Delegates describe briefly the appeal avenues available to FMA members who are found to be in non-compliance with requirements of the CME program. The Committee on Continuing Medical Education is of the opinion that more detailed rules, including deadlines and cut-off dates, are needed as soon as possible since 1979 is the first year that county medical societies must report delinquent members to FMA.

### RECOMMENDATION NO. B-3

**THAT THE PROPOSED PROCEDURES INCLUDED IN THE DELEGATES' PACKET FOR APPEAL AND SUSPENSION UNDER THE FMA MANDATORY CME PROGRAM FOR MEMBERS BE ADOPTED.**

**Distribution of CME Material** — Reiterated FMA continuing medical education policy that any promotional literature of a scientific or educational nature proposed for distribution during FMA Annual Meetings be made available only through an accepted scientific, educational or technical exhibit that conforms to the requirements and standards for exhibits; or through a scientific program.

## COUNCIL ON SPECIALTY MEDICINE

**AMA Resolution on Cost Containment** — The Board reviewed a recommendation regarding adoption of an AMA proposed resolution on cost containment.

### RECOMMENDATION NO. B-4

**THAT THE FOLLOWING RESOLUTION ON COST CONTAINMENT BE ADOPTED:**

Whereas, Increases in the cost of medical care are real and continuing, causing concern by individuals, families, business, government and physicians, and

Whereas, Much of the increase in cost is caused by new technology and treatment methods which result in better care, prolonged life or a better quality of life, and

Whereas, Other important factors causing the increases in costs are government regulations, higher labor, energy and malpractice costs and general inflation, and

Whereas, The American Medical Association, American Hospital Association and Federation of American Hospitals late in 1977 created the Voluntary Effort aimed at moderating increases in hospital charges, which have already begun to moderate, and

Whereas, Tom E. Nesbitt, M.D., President of the American Medical Association, called on physicians in his inaugural address to use similar restraint in their fee increases, be it

RESOLVED, That the Florida Medical Association continue to encourage its member physicians to help moderate increases in medical care costs by using appropriate restraints to keep fee increases more nearly in line with the annual increase in cost of living; and be it further

RESOLVED, That the Florida Medical Association endorses the Voluntary Effort as a responsible private-sector activity to restrain increases in hospital costs without arbitrary limits or government intervention.

**Committee on Administrative Medicine** — The Board approved establishment of a committee of the Board of Administrative Medicine and Management to provide liaison with the Florida Society of Administrative Medicine, Florida Medical Group Management Association and others as authorized, to be composed of a chairman and a representative from each participating group. The action was taken in lieu of creating an affiliate category of membership on the Council on Specialty Medicine.

**Specialty Group Recognition Program** — The Board reviewed the Council's recommendation regarding a modification in the Association's criteria for recognition. The Council has initial responsibility for the annual review of applications for continuing recognition. According to the Council, most of these applications do not meet the guidelines requiring that 100 percent of the active eligible members shall be members of the FMA. There are a number of reasons why the membership requirement is not being obtained such as pending applications with county medical societies, osteopathic members who may not be eligible, and the requirements of certain specialty groups.

### RECOMMENDATION NO. B-5

**THAT THE PRESENT SPECIALTY GROUP**

**RECOGNITION PROGRAM GUIDELINE REQUIRING 100 PERCENT FMA MEMBERSHIP BE MODIFIED TO ALLOW FOR A 10 PERCENT VARIATION IN COMPLIANCE; AND FURTHER**

**TO ESTABLISH THE FOLLOWING LEVELS OF RECOGNITION IN ORDER TO PROVIDE A TRANSITION PERIOD WHICH WOULD ALLOW SPECIALTY GROUPS TO FULLY COMPLY FOR FULL RECOGNITION:**

1. **FULL RECOGNITION — REQUIRING REVIEW EVERY TWO YEARS INSTEAD OF YEARLY;**
2. **PROVISIONAL RECOGNITION — A MINOR ADMINISTRATIVE VARIATION FROM THE GUIDELINES;**
3. **PROBATIONARY RECOGNITION — A MAJOR DISCREPANCY EXISTS WITH THE GUIDELINES AND REQUIRES ANNUAL REVIEW.**

**and further,**

**THAT THE FOLLOWING CATEGORIES OF RECOGNITION FOR SPECIALTY GROUPS BE APPROVED:**

| Specialty Group | Recognition |
|---|---|
| Florida Allergy Society | Full Recognition |
| Florida Society of Anesthesiologists | Full Recognition |
| Florida Chapter, American College of Chest Physicians | Probationary Recognition |
| Florida Society of Dermatology | Full Recognition |
| Florida Endocrine Society | Probationary Recognition |
| Fla. Academy of Family Physicians | Full Recognition |
| Florida Society of Neonatal-Perinatologists | Full Recognition |
| Florida Neurosurgical Society | Provisional Recognition |
| Florida OB-GYN Society | Full Recognition |
| Florida Society of Clinical Oncology | Full Recognition |
| Florida Society of Ophthalmology | Full Recognition |
| Florida Orthopedic Society | Full Recognition |
| Florida Society of Pathology | Full Recognition |
| Fla. Assn. of Pediatric Cardiologists | Full Recognition |
| Florida Assn. of Pediatric Surgeons | Full Recognition |
| Florida Society of Physical Medicine and Rehabilitation | Probationary Recognition |
| Florida Society Plastic and Reconstructive Surgery | Provisional Recognition |
| Florida Radiological Society | Full Recognition |
| Florida Society of Rheumatology | Full Recognition |
| Florida Thoracic Society | Probationary Recognition |
| Florida Society of Otolaryngology | Full Recognition |
| Florida Urology Society | Full Recognition |
| Florida Assn. Nuclear Physicians | Full Recognition |
| Florida Chapter of American College of Emergency Physicians | Probationary Recognition |
| Florida Society of Internal Medicine | Full Recognition |
| Florida Region, American College of Physicians | Full Recognition |
| Florida Psychiatric Society | Provisional Recognition |
| Florida Chapter American College of Surgeons | Full Recognition |
| Florida Assn. General Surgeons | Full Recognition |
| Florida Society of Thoracic and Cardiovascular Surgeons | Full Recognition |
| Florida Society of Nephrology | Full Recognition |
| Fla. Society for Preventive Medicine | Full Recognition |
| Florida Pediatric Society | Full Recognition |
| Florida Society for Colon and Rectal Surgeons | Probationary Recognition |
| Florida Gastroenterologic Society | Full Recognition |
| Florida Society of Neurology | Probationary Recognition |
| Fla. State Surgical Division, International College of Surgeons | Probationary Recognition |
| Fla. Occupational Medical Assn. | Probationary Recognition |

**Cerebella Stimulator Pacemakers** — Advised the United States Civil Service Commission that the FMA has not taken a position with regard to Cerebella Stimulator Pacemakers but that the FMA's Council on Specialty Medicine has reviewed this procedure and has made the following observations:

- At the present time, the procedure is experimental;
- It is not universally accepted as sound or valid medical treatment for the diagnosis or treatment for any specific diagnosis;
- The procedure is rendered within accepted professional medical standards in Florida.

**Florida Regional Association of Blood Service Units** — Authorized the FMA to become an initial member of the Florida Regional Association of Blood Service Units subject to:

1. Having an FMA representative on the Council of the Florida Association of Blood Banks; and,
2. Having the Articles of Association reviewed by FMA Legal Council.

## Report of the Ad Hoc Committee on Nutrition

The Reference Committee commended Dr. Yank Coble Jr., Chairman, and the Ad Hoc Committee on Nutrition for their efforts in planning the three-day Symposium on Nutrition that was held during the 1979 Annual Meeting of the Florida Medical Association, and for their contributions to the Special Issue on Nutrition of *The Journal of the Florida Medical Association.*

The motion of the Reference Committee that the report of the Ad Hoc Committee on Nutrition be adopted as printed in the Handbook carried.

### Ad Hoc Committee on Nutrition

Yank D. Coble Jr., M.D., Chairman

Durig this Association year, the Ad Hoc Committee on Nutrition held five meetings: in Miami, on June 15, 1978; in Tampa, on July 22, 1978 and September 8, 1978; and in Miami, on October 12, 1978 and January 12, 1979. The following is a summary of the Committee's activities:

A major portion of the Committee's efforts has been in the planning of a three-day Symposium on Nutrition to be held as a Scientific Section of the FMA's Annual Meeting Scientific Program. This event will be co-sponsored by the Florida Academy of Family Physicians, the Florida Society of Clinical Oncologists, and Lederle Laboratories. The program will feature both in and out-of-state speakers with national and international reputations in the field of nutrition.

The Committee also devoted a significant amount of time to the development of a *Journal* Special Issue on Nutrition scheduled for publication in April 1979. The Guest Editor, Dr. Lewis A. Barness, and his Co-editors, Drs. George Christakis, Donald I. Macdonald and myself, have attempted to provide information that is accurate and will assist the practicing physician in preventing and treating disease.

Other topics considered during the Committee's meetings this year included nutrition in medical school curriculums, proposed state legislation involving breakfast cereal labeling, and comprehensive health education. The Committee also partipated in planning regional nutrition seminars in cooperation with Abbott Laboratories.

## Report of the Council on Scientific Activities

The motion of the Reference Committee that the report of the Council on Scientific Activities be adopted as printed in the Handbook carried.

## Council on Scientific Activities

Yank D. Coble Jr., M.D., Chairman

The Council on Scientific Activities met three times during the year to consider reports and recommendations of component committees and to act upon other matters referred to it. Sessions were held in Jacksonville on July 7, 1978; in Gainesville on September 15, 1978; and in Jacksonville on February 23, 1979. Appropriate recommendations have been formulated and forwarded to the Board of Governors in other reports.

The work of the Council is summarized under appropriate headings and subheadings below:

### Committee on Continuing Medical Education

The Committee on Continuing Medical Education has compiled another record of outstanding performance under the capable leadership of O. Frank Agee, M.D., of Gainesville, who is completing his second year as Chairman. The Committee met on August 4, 1978, in Tampa; on November 17, 1978, in Arcadia; and on February 9, 1979, in Orlando.

1. **Annual Meeting Scientific Program:** One of the most expansive scientific programs in recent years has been arranged for the 105th Annual Meeting of the Florida Medical Association under the supervision of Henry M. Yonge, M.D., of Pensacola, and Calvin W. Martin, M.D., of Arcadia, Chairman and Acting Chairman, respectively, of the Subcommittee on Annual Meeting Scientific Program.

Highlighting the program will be a Symposium on Nutrition, which has been arranged for Wednesday afternoon, May 23, Thursday afternoon, May 24, and Friday morning, May 25, by the FMA Ad Hoc Committee on Nutrition with the Florida Society of Clinical Oncology and Florida Academy of Family Physicians. The Symposium will be followed on Friday afternoon by nutrition workshops. In addition, several FMA-recognized specialty groups have arranged programs devoted wholly or in part to nutrition, the theme for the 105th Annual Meeting.

FMA-recognized specialty groups have arranged 37 scientific sections for Wednesday and Thursday afternoons, all day Friday, and Saturday morning.

Wyeth Laboratories will make available Programmed Instruction using AutoTutors during normal scientific program hours. Once again, Pfizer Laboratories will provide four hours of "Dialogue" with each hour featuring a guest professor.

Regrettably, there has been a sharp decrease in the number of applications for scientific and educational exhibit spaces this year. However, as this report was prepared, it appeared there would be at least 20 displays.

For the second year, the program is co-sponsored by the Medical Education Committee of the Florida Medical Foundation with Florida's three medical schools, and meets the criteria for 20 hours of AMA Category I Credit. The American Academy of Family Physicians has approved segments of the program for AAFP Prescribed Credit.

2. **Accreditation:** The following actions have taken place with regard to institutional and organizational CME accreditation in the past year:

A. Cedars of Lebanon Health Care Center in Miami was reaccredited by the Liaison Committee on Continuing Medical Education (LCCME) for three years beginning June 2, 1978.
B. Tallahassee Memorial Hospital was reaccredited by the LCCME for three years beginning June 2, 1978.
C. Dade County Medical Association was reaccredited by the LCCME for three years beginning December 14, 1978.
D. Florida Academy of Family Physicians was reaccredited by the LCCME for three years beginning June 2, 1978.
E. The Medical Education Committee of the Florida Medical Foundation was reaccredited by the LCCME for three years beginning December 14, 1978.
F. The Committee on Continuing Medical Education has recommended that the provisional accreditation of Mercy Hospital be extended for one year.
G. The Veterans Administration Center at Bay Pines has been accredited provisionally for one year beginning December 14, 1978.
H. Hollywood Memorial Hospital has been accredited provisionally for two years beginning December 14, 1978.
I. The Orlando Regional Medical Center was accredited provisionally for two years beginning December 14, 1978.
J. The Florida Lung Association was surveyed on February 9, 1979, by the Committee on Continuing Medical Education, which recommended to the LCCME that it be accredited provisionally for two years.

3. **Individual CME Program for Members:** In 1979, for the first time, county medical societies are required to report to FMA the names of members who have failed to meet the Association's minimum continuing medical education requirements. As this report was prepared, it was obvious that many county medical societies were making extraordinary efforts to encourage delinquent members to come into compliance. Inasmuch as the rules of the CME program provide that delinquent members may use 1979 to make up any hours they are lacking, it is probable that the ultimate rate of noncompliance will be very small.

The rules of the program as adopted in previous years provide only brief mention of avenues of appeal for delinquent members and appeal procedures. The Committee on Continuing Medical Education has developed a more detailed protocol for appeal and suspension, which has been approved by the Council on Scientific Activities and passed on to the FMA Board of Governors.

4. **Exemptions and Extensions:** In 1978, the House of Delegates removed the automatic exemption of FMA Life Members from the CME program. Late last year, the Secretary of the Florida Medical Association notified each Life Member individually that he or she would be subject to the full requirements of the CME program beginning January 1, 1979, unless he or she is totally and permanently retired from the practice of medicine or exempted for some other reason.

Also in 1978, the House of Delegates repealed the rule allowing part-time physicians to have their required CME hours reduced to a level commensurate with the number of hours they spend weekly in the practice of medicine. Thus, all physicians will be expected to meet the same minimum requirements of CME irrespective of the number of hours they devote to medical practice. All physicians who were granted reduction in hours under the old proration rule were advised they

would be allowed to finish their current cycles under the agreement. In subsequent cycles, they must meet the 150-hour triennial requirement unless exception is granted for some other compelling reason.

5. **American Osteopathic Association Credit:** During the year, a county medical society sought the advice of the Committee on Continuing Medical Education as to how to evaluate a CME report submitted by an osteopathic member which was, in fact, an American Osteopathic Association transcript. As a temporary solution, the Committee advised county medical societies they may accept AOA Category 2-D Credit as Mandatory Credit, provided that the CME activity was sponsored by an allopathic organization or institution, and provided the reporting physician can demonstrate the activity(ies) for which credit is sought meet(s) the criteria for FMA Mandatory Credit. The Committee will conduct further study in this area before developing permanent guidelines.

6. **Program Approval:** For several years, the Subcommittee on Program Approval has been reviewing applications submitted by county medical societies, hospitals and others for award of FMA Mandatory Credit. This review mechanism continues to have a high degree of utilization. During the year-long period from March 1, 1978, to February 28, 1979, 320 such applications were received and referred to the Subcommittee.

The matter of the cost of continuing medical education seems to be a growing concern to Florida physicians, many of whom have contacted Committee members about it. The Committee plans to give closer attention to tuition and/or registration fees in its review of credit applications. A maximum of $10 to $12 per credit hour will be used as a general yardstick. In cases where fees exceed those limits, the Committee will contact the course directors or program sponsors for justification and further information.

7. **Representation at Meetings:** The Committee was represented by a member and/or staff at the following meetings during the year: meetings of the National Council of State Chairmen of Continuing Medical Education in St. Louis, June 1978, and in Chicago, October 1978; the AMA's Sixth Annual Conference on Continuing Medical Education for State Medical Associations and Specialty Societies, in Chicago, October 1978; and the Liaison Committee on Continuing Medical Education, Chicago, December 1978.

**Committee on Scientific Publications**

Gerold L. Schiebler, M.D., of Gainesville, is completing his fourth year as Chairman of the Committee on Scientific Publications and Editor of *The Journal of the Florida Medical Association*. Members of FMA can indeed be proud that *The Journal* has maintained a position of prominence among the nation's state medical journals.

In February, three editors of *The Journal of the American Medical Association* spent two days at the Jacksonville headquarters conferring with editors of the JFMA. They reported they were particularly impressed with JFMA's article review procedures, which are designed to enhance high quality in the scientific section; the involvement of hundreds of FMA members in the production of the magazine; and JFMA's experience with special issues. All of these, of course, are hallmarks of JFMA's quality.

1. **Awards:** In September 1978, JFMA was announced as the winner, for the third consecutive year, in the best special issue category of the Florida Magazine Association's Magazine Awards Contest. The 1978 winner was the March issue on "Adverse Reactions to Plants in Florida." JFMA also was cited for general excellence in the non-profit association category.

Looking for its first triumph in the Sandoz Medical Journalism Awards Contest, JFMA has entered for the third year in a row.

2. **JFMA Contest for County Medical Society Bulletins:** Winners in the Second Annual Journal of the Florida Medical Association Awards Contest for County Medical Society Bulletins will be announced during the Annual Meeting at the General Session on Friday, May 25. Competition is in five categories: General Excellence; Best Regular Feature; Most Improved Bulletin; Best Editorial; and Special Recognition. It is felt that this program has had the noticeable effect of improved county medical society bulletins.

3. **Special Issues:** Several additional special issues of *The Journal* have been published since the 1978 Annual Meeting. In addition to the customary August Historical Issue, these have been: Special Issue on Otolaryngology (September 1978); Special Issue on Orthopaedic Surgery (January 1979); Special Issue on FMA Programs (February 1979); Special Issue on Nutrition (April 1979); and the Third Annual Auxiliary Issue (May 1979).

**FMA's outgoing and incoming Presidents and their wives donned attire of yesteryear to pose for their traditional picture together. Seated: retiring President O. William Davenport, M.D., Miami (left); and new President Richard S. Hodes, M.D., Tampa. Standing: Mrs. Davenport (left) and Mrs. Hodes.**

The Council on Scientific Activities and the Committee on Scientific Publications are indebted to Troy Hutchinson, M.D., of Lakeland, Guest Editor, for the Otolaryngology Issue, and Joseph C. Flynn, M.D., of Orlando, Guest Editor, and Ronald J. Mann, M.D., of Miami, Co-Guest Editor, for the Orthopaedic Issue, who served by appointment of their specialty societies. The Council and Committee also are grateful to FMA Secretary Robert E. Windom, M.D., of Sarasota, Guest Editor for the FMA Programs Issue; and to the FMA Ad Hoc Committee on Nutrition, Lewis A. Barness, M.D., of Tampa, Guest Editor and George Christakis, M.D., of Miami, Yank D. Coble Jr., M.D., of Jacksonville, and Donald I. Macdonald, M.D., of Clearwater, Co-Guest Editors for the Nutrition Issue.

Future special issues are planned on pathology, family practice, and thoracic and cardiovascular surgery; the 20th anniversary of the University of Florida College of Medicine; and on charitable works of physicians.

4. **New Departments:** A new departmental feature called "Professional Liability Legal Update" made its appearance this year. This feature provides timely and interesting commentary on relevant cases that have been channeled through the Florida Judicial system. It is prepared monthly by the office of the Counsel, Professional Insurance ManagementCompany (PIMCO).

5. **Design and Format Changes:** Paul Fisher, Ph.D., Professor of Journalism at the University of Missouri School of Journalism, was retained to study *The Journal* and to suggest ways it might be improved in design and format. Many of the recommendations of Professor Fisher are being phased in over several months. They will include design changes in the scientific section; and overhaul of the contents page; and the use of typewriter type and expanded margins to give *"From the Editor's Desk"* a more up-to-date appearance.

6. **Readership Surveys:** In the last half of 1978, *The Journal* was one of nine state journals selected by the State Medical Journal Advertising Bureau (SMJAB) to be included in the 1978 Health Research Survey. Despite the July Proceedings Issue being selected for the study, *The Journal* surfaced from the survey with good marks. Eighty percent of the respondents said they had read the issue; all said they wanted to continue receiving *The Journal;* and JFMA readers have a per-issue average reading time of 34 minutes, highest of the nine journals tested.

7. **Advertising Revenue:** The Committee on Scientific Publications has been concerned about a decline in advertising revenues collected by *The Journal* from the SMJAB throughout 1978 and into the first quarter of this year. JFMA's January-March 1979 collections were off 25% compared with 1978's first quarter figures, while the 33 participating state journals showed an aggregate gain of 2.64%. SMJAB representatives can offer no explanation. However, the fact that many state journals have raised their advertising rates over the last two years may account for at least part of the aggregate gain. Florida's generic drug law has been mentioned as a possible reason for the drop in *The Journal's* billings, with advertisements possibly being shifted to pharmaceutical journals.

8. **County Medical Society Visitations:** Editors of *The Journal* continued their county medical society visitation program, with about 20 societies having been visited over the last three years. During these visits, the editors solicit suggestions as to how *The Journal* may be made more useful to members.

### Committee on Medical Education

The Committee on Medical Education is FMA's formal link with Florida's medical schools. J. Donald Wargo, M.D., of Boca Raton, has been its capable leader for the past four years.

The Committee has been interested in such matters as the current medical school admission requirements, and related problems.

### Committee on Research

The Council on Scientific Activities sits as a committee to review and make appropriate recommendations regarding applications for Florida Medical Foundation research grants. Due to inadequate funds, no projects were funded this year. However, the Council called for, reviewed and accepted progress reports on several projects funded previously but still ongoing.

### Florida Medical Foundation

Cose contact is maintained with the Florida Medical Foundation's Committee on Medical Education, which has been headed since its creation by Robert H. Threlkel, M.D., of Jacksonville. As noted elsewhere in this report, the Committee this year was reaccredited in December 1978 for three years by the Liaison Committee on Continuing Medical Education.

As an accredited co-sponsor, Dr. Threlkel's Committee has worked with several sponsors of continuing medical education activities in developing programs that meet the criteria for American Medical Association Category I Credit. The Committee is cosponsoring the 105th FMA Annual Meeting program, the second year it has done so.

During 1978-79, the FMF Committee developed guidelines for registration and tuition fees charged for CME activities. The Committee will insist that fees will be reasonable for CME activities it is asked to co-sponsor.

The Committee's Registry of Scientific Speakers became operational during the year. This registry contains the names of about 300 physicians and is designed as a service for county medical societies and hospitals in arranging continuing education activities.

## Report of the Council on Specialty Medicine

The motion of the Reference Committee that the item on mental health district boards be deleted from the report and filed carried.

The motion of the Reference Committee that the report of the Council on Specialty Medicine be adopted as amended, with the exception of those items referred to other reference committees carried.

### Council on Specialty Medicine

Dick L. Van Eldik, M.D., Chairman

The Council on Specialty Medicine held three meetings during this Association year 1978-79, in Orlando: on September 9, 1978, December 9, 1978, and February 24, 1979. In addition, the Council's Ad Hoc Committees on Physician Population Ratios, Recognition of Specialty Groups, and Specialty Screens, held meetings in conjunction with these meeting dates.

Presently, the Council is comprised of 37 FMA recognized specialty groups, and one new application for recognition is pending Board approval. The following is a summary of the Council's activities:

**Second Opinions** (Filed — Ref. Comm. No. III)

**Health Systems Agencies** — The FMA Committee on HSA's reported the need for close cooperation between specialty groups and the HSA Committee in reviewing HSA proposals. The Council recommended that the FMA urge all county medical societies to encourage members of their societies to apply for membership on local

HSA's to insure good medical input. In addition, the Council has asked each FMA recognized specialty group to appoint a physician coordinator to work with the HSA Committee.

**Mandatory Immunization Requirements for College Entrance** — The School Health Committee was notified that the Council was opposed to compulsory rubella immunizations for college entrance.

**Annual Athletic Physicals** — The Committee on Sports Medicine was notified that the Council recommends that the current requirement of annual athletic physicals for contact sports be continued.

**Cerebellar Stimulator Pacemaker** — The United States Civil Service Commission wrote to the FMA requesting information regarding the validity of implanting cerebellar stimulator pacemakers. The Council took the following position:

1. At the present time the procedure is experimental;
2. It is not universally accepted as sound or valid medical treatment for any specific diagnosis;
3. The procedure is rendered within accepted professional medical standards in Florida.

**Insect Sting Kits** (Filed — Ref. Comm. No. II)

**Legislative Programs** — This year the Council on Legislation and Regulations and the Council on Specialty Medicine worked together on communications between specialty groups and the FMA with regard to legislative matters. A joint meeting of these two Councils was held in December and provided an excellent format for specialty group input into FMA legislative programs.

**Florida Association of Blood Service Units** — At the request of the Board of Governors, the Council studied the proposed Charter of the Florida Association of Blood Service Units and recommended that the FMA participate in this organization provided an FMA representative is placed on the organization's governing body.

**Specialty Group Recognition Program** — One of the most difficult tasks the Council faced was the development of guidelines for recognition of specialty groups. In recent years, several new medical organizations have been created. Many are worthwhile and will contribute to the advancement of quality medical care; others will fall by the wayside and may cause decay of well-founded groups and threaten the integrity of the organization as a whole. This year, for the first time, the Council conducted a program for renewing recognition of specialty groups. All 37 recognized specialty groups were requested to submit an application for review by the Council. Categories of recognition are as follows:

1. Full recognition — requiring review every two years;
2. Provisional Recognition — a minor administrative variation from the guidelines;
3. Probationary Recognition — a major descrepancy exists with the guidelines and requires annual review.

Presently, one new application from the Florida Occupational Medical Association is pending Board approval.

In response to a resolution on specialty screens from the Florida Society of Internal Medicine, the Council notified the Board there is a significant segment of physicians in Florida who are members of the FMA that are dissatisfifed with the present policy of the FMA Board of Governors and House of Delegates with regard to specialty screens.

**Physician Population Ratios** — The Council's Ad Hoc Committee on Physician Population Ratios continued their study of this subject and has requested funds to obtain additional professional staff to assist in this project.

**Mental Health District Boards** — (Filed)

**Advanced Nurse Practitioners** — The Council, along with the FMA Committee on Allied Health Professions, monitored the activities of advanced nurse practitioners who have demanded the ability to perform procedures now in the realm of practicing physicians. The Council has recommended support for members of the Florida Board of Medical Examiners who serve on the Joint Advisory Committee to the Board of Nursing.

**Emergency Medicine** — The Council joined the Florida Chapter of American College of Emergency Physicians in their opposition to any movement to modify Florida's Emergency Medical Service Act to eliminate the requirement that advanced life support systems must have a medical director. Other problems emergency physicians are having deal with the unavailability of professional liability insurance for EMS medical directors and the increasing number of assaults on emergency personnel in Florida.

**Radiologic Technology Law** — The Council reviewed and provided input into the writing of the rules and regulations for the new Radiologic Technology Law passed in the 1978 Legislative Session. The general concensus was that this legislation was unnecessary but the changes in the rules FMA obtained at least made it workable.

**Eugene G. Peek Jr., M.D., of Ocala, President of the Florida Medical Foundation, presents an AMA-ERF check for $11,607.28 to William B. Deal, M.D., Dean of the University of Florida College of Medicine (far left), as Mrs. Thomas B. Thames of Orlando, President of the FMA Auxiliary, looks on. Hollis G. Boren, M.D., Dean of the University of South Florida College of Medicine (extreme right), accepts a check for $8,032,50. A check for the University of Miami School of Medicine in the amount of $10,127.80 was presented to Mr. James Baldwin, who accepted for Dean E. M. Papper, M.D.**

**School of Optometry** — The Council supported the Florida Society of Ophthalmology's opposition to a School of Optometry in Florida, and the need for legislation that would prohibit optometrists from using drugs in diagnostic procedures.

**Rheumatology Standards** — In response to a request from the Florida Society of Rheumatology, the Council endorsed the concept of the Florida Rheumatology Society developing standards of rheumatology care for review by the Council on Specialty Medicine and final approval of the FMA Board of Governors.

## Report of the Florida Medical Foundation

The motion of the Reference Committee that the items on the Committee on Medical Education and Research Grants in the report of the Florida Medical Foundation be adopted carried. (See Report of Florida Medical Foundation, page 761).

## RESOLUTION 79-4
## CME Requirement for FMA Membership
## Capital Medical Society

A representative of the Capital Medical Society which introduced Resolution 79-4 advised that they wished to withdraw the resolution. Since there was no one present in support of Resolution 79-4, it was not considered.

## RESOLUTION 79-30
## Membership Education — Patient Care Evaluation Studies
## James F. Richards Jr., M.D., Delegate

The motion that Resolution 79-30 be adopted as amended carried.

### RESOLUTION 79-30
### Membership Education — Patient Care Evaluation Studies

RESOLVED, That the Florida Medical Association include in its educational programs the importance and methodology of patient care evaluation studies in peer review.

The Chairman thanked the members of the Committee for their dedicated participation in the hearings of the Reference Committee and the preparation of the report. He also thanked Dr. Richard G. Connar and William J. Dean for serving as advisors. Appreciation was expressed to Mrs. Cindy Kelly, Recording Secretary, for her efficiency in preparing the report and Mr. Edward D. Hagan, FMA staff, for his counsel to the Committee.

The motion of the Reference Committee that the report of Reference Committee I be adopted as amended carried.

## EMERGENCY RESOLUTION 79-31

Unanimous approval was given to consider an Emergency Resolution presented by Dr. Thomas D. Bartley, M.D., of Alachua County.

Dr. Hodes moved that the Emergency Resolution be approved in principle and that the Resolution be allowed to be rewritten to fit the technical problems of the legislation pending, and that support be given to the proposal of Senator Dunn regarding this legislation. The motion was seconded and carried unanimously.

### RESOLUTION 79-31
### Opposition to Pending Florida Legislation Allowing Unlimited Reciprocity for Physician Licensing

Whereas, The currently pending revision to the Medical Practice Act contains provisions which are not in the best interests of the citizens of the State of Florida, and

Whereas, One of the proposed revisions would allow unlimited licensure by endorsement (Reciprocity), and

Whereas, Such reciprocity may allow for licensure of substantial numbers of incompetent or poorly qualified physicians to practice in Florida, and

Whereas, The Florida Legislature has not given adequate consideration to the reciprocity issue and other important changes to the Medical Practice Act, and

Whereas, There is a currently pending bill in the Legislature to extend the "Sunset of all Professional Boards", therefore be it

RESOLVED, That the Florida Medical Association approves the proposed provisions of the Medical Practice Act that provide for licensure by endorsement (Reciprocity), be it further

RESOLVED, That the Florida Medical Association support legislation to extend the "Sunset Law" beyond June 30, 1979 unless it is determined by the President in consultation with the Legislative Council Chairman that the bill substantially conforms to FMA policy.

## Elections
## President-Elect

The Speaker opened the floor for nominations for the office of President-Elect of the Association for 1979-80.

Dr. Robert B. Trumbo of Orange County placed in nomination the name of Dr. T. Byron Thames of Orlando.

Dr. Thames' nomination was seconded by Dr. Rufus Broadaway of Dade County; Dr. Richard Connar of Hillsborough County; Dr. Luis Guerrero of Palm Beach County; Dr. Gerold Schiebler of Alachua County; Dr. Donald Nikolaus of Pinellas County; Dr. Charles Kahn of Escambia County; and Dr. Yank Coble of Duval County.

Nominations were closed and by unanimous vote Dr. T. Byron Thames was elected President-Elect.

**Thomas B. Thames, M.D., of Orlando, is escorted to the head table by Robert Trumbo, M.D., Orlando (left), and Edward W. Stoner, M.D., Oviedo, after he was proclaimed President-Elect of FMA by acclamation. At right, Dr. Thames addresses the House of Delegates for the first time in his new role.**

**Vice President**
**Speaker of the House**
**Vice Speaker**
**Secretary**
**Treasurer**
**AMA Delegates and Alternates**

The floor was opened for nominations for the office of Vice President. Dr. Luis Guerrero of Palm Beach County moved that all of the names of the announced unopposed candidates for Vice President, Speaker of the House, Vice Speaker, Secretary, Treasurer and AMA Delegates and Alternates (Seats No. 1, 4, 6 and 7) be placed in nomination and that nominations be closed. The motion carried. All nominees to the stated offices were elected by unanimous vote of the House and are:

Vice President — William W. Thompson, M.D.
Speaker of the House — Sanford A. Mullen, M.D.
Vice Speaker — James B. Perry, M.D.
Secretary — Robert E. Windom, M.D.
Treasurer — J. Russell Forlaw, M.D.

AMA Delegates and Alternates
Terms 1-1-80 — 12-31-81
Seat #1 — Delegate — James T. Cook Jr., M.D.
Alternate — Vincent P. Corso, M.D.
Seat #4 — Delegate — Burns A. Dobbins, M.D.
Alternate — Eugene G. Peek, M.D.
Seat #6 — Delegate — Rufus K. Broadaway, M.D.
Alternate — T. Byron Thames, M.D.
Seat #7 — Delegate — Joseph C. Von Thron, M.D.
Alternate — William J. Dean, M.D.

## Judicial Council

The Speaker referred the House to the report of the Board of Governors in which the Board had nominated Dr. James A. Winslow for election to the Judicial Council from District B for a five-year term expiring in 1984, and Dr. O. Frank Agee to complete the unexpired term from District A, expiring in 1980.

The nominations were adopted and Doctors James A. Winslow and O. Frank Agee were elected.

## Committee on Membership and Discipline

The Speaker referred the House to the nominations for election to the Committee on Membership and Discipline as submitted by the Board of Governors in its report and asked for additional nominations from the floor. Dr. William Meyer Jr. of St. Lucie-Okeechobee County placed the name of John N. Sims, M.D., in nomination from District #10. Dr. Fred Carter of Martin County seconded the nomination.

The Speaker moved that the nominees as proposed by the Board of Governors, except for District 10, be elected to the Committee on Membership and Discipline. The motion was seconded and carried unanimously.

The Speaker called for a vote on the nominees for District #10. Dr. John Sims was elected to represent District #10 on the Committee on Membership and Discipline.

| | |
|---|---|
| District 1 | C. Fenner McConnell, M.D. (83) |
| District 2 | Robert P. Johnson, M.D. (83) |
| District 3 | Hugh A. Carithers, M.D. (83) |
| District 4 | Edwin H Updike, M.D. (83) |
| District 5 | Frank C. Bone, M.D. (83) |
| District 6 | David T. Overbey, M.D. (83) |
| District 7 | Linus W. Hewit, M.D. (83) |
| District 8 | Thomas R. Busard, M.D. (82) |
| | Ernest P. Palmer, M.D. (83) |
| District 9 | Franklin B. McKechnie, M.D. (83) |
| District 10 | John N. Sims, M.D. (83) |
| District 11 | John Corbitt, M.D. (83) |
| District 12 | Miles J. Bielek, M.D. (83) |
| District 13 | John G. Maclure, M.D., (83) |
| District 14 | Robert J. Schiess, M.D. (83) |
| District 15 | Sol Colsky, M.D. (83) |

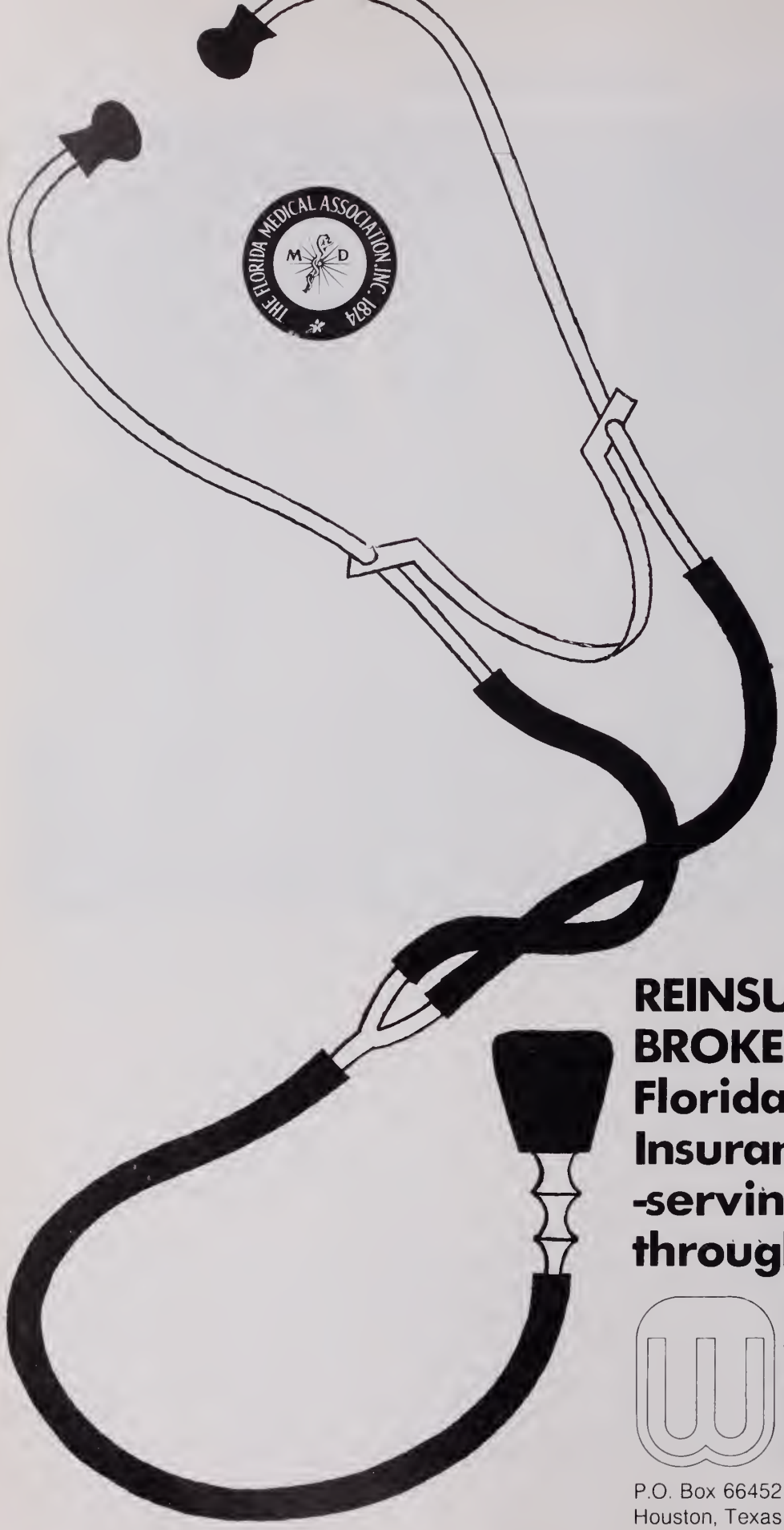
President Hodes announced the presidential appointments to the Board of Governors as follows:

District C — James G. White, M.D. (81)
District B — Thomas E. McKell, M.D. (83)
At Large Member — Walter C. Jones, M.D. (80)
AMA Representative — Richard G. Connar, M.D. (80)
Exec. Committee Appointment — J. Lee Dockery, M.D.

The Speaker resumed the Chair and called on Dr. Burns A. Dobbins for the Benediction.

Dr. Dobbins: "Our Heavenly Father, we are indeed grateful for the opportunity that we have to be together and for our opportunity to serve your people. Help us as we go about our daily tasks and bless us. Bless this Society and help us to make the right decisions in the future and be with us until we meet again."

The 1979 House of Delegates adjourned at 10:31 a.m.

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# ORGANIZATION

# Dr. Yank D. Coble Named to Faculty Chair At University of Florida

Dr. Coble

Yank D. Coble Jr., of Jacksonville, President of the Duval County Medical Society and a well-known medical leader in Florida, has been named to head a department at the University of Florida College of Medicine.

Dr. Coble's appointment as Professor and Chairman of the Department of Community Health and Family Medicine and Professor of Medicine was announced by William B. Deal, M.D., Vice President for Health Affairs and Dean of the College of Medicine. The appointment was effective July 1.

"We are most fortunate to have an individual of Dr. Coble's caliber and extensive medical experience on the College of Medicine Faculty," Dr. Deal observed.

Dr. Coble succeeds J. Russell Green, M.D., who has been serving as Acting Chairman since the resignation of Richard Reynolds, M.D., several months ago.

"I am looking forward to the challenge and the opportunity to make whatever contributions I can," Dr. Coble said of his appointment.

An internist and endocrinologist, Dr. Coble has practiced in Jacksonville for several years. Over the years he has maintained strong academic ties, most recently as Clinical Associate Professor of Medicine for the University of Florida/Jacksonville Health Education Program.

A leader in organized medicine, Dr. Coble recently began his third year as Chairman of the Florida Medical Association's Council on Scientific Activities. Prior to that he chaired the FMA's Committee on Continuing Medical Education.

He was the first Chairman of the Florida Diabetes Advisory Council which was established by the State Legislature a few years ago, and is a former President of the Florida Endocrine Society.

As Chairman of FMA's Ad Hoc Committee on Nutrition, he was involved with the publication of the Special Issue of *The Journal* on Nutrition, which was published last April; and with the implementation of the nutrition theme for the scientific program for last May's FMA Annual Meeting.

A native of Burlington, N.C., Dr. Coble received his M.D. degree in 1962 from Duke Medical School, where he was President of the student body. He received graduate training at The New York Hospital and at the London School of Tropical Medicine, where he earned a degree in clinical medicine of the tropics. For five years he served in the United State Public Health Service, being discharged with the rank of Commander.

Dr. Coble and his wife, Ohlyne, are the parents of two daughters, Elizabeth and Margaret.

# UF's J. Lee Dockery, M.D. Honored For Teaching Excellence

J. Lee Dockery, M.D., Associate Dean of the University of Florida College of Medicine, has received the graduating class's 1979 Hippocratic Award for Teaching Excellence.

Senior medical student Joseph Sheppard made the presentation on the grounds of Gainesville's Shands Teaching Hospital on April 27 near the "Tree of Hippocrates," an authentic sycamore rooting from the legendary tree under which Hippocrates taught medical students.

Dr. Dockery, Associate Professor of Obstetrics and Gynecology, was cited as the teacher the class feels best exemplifies the ideals of Hippocrates. His name will be inscribed along with those of previous winners on a bronze plaque attached to a rock next to the tree.

Dr. Dockery is a former Vice President of the Florida Medical Association and now is a member of the FMA Board of Governors.

Prior to joining the University of Florida faculty in 1975, Dr. Dockery practiced in Miami with O. William Davenport, M.D., Immediate Past President of FMA.

He is a graduate of the University of Arkansas School of Medicine and had residency training at Jackson Memorial Hospital in Miami. Previously, Dr. Dockery was awarded the Outstanding Clinical Scientist Award at the University of Florida in 1977, and was elected by the 1978 graduating class as "Teacher of the Year."

Dr. Dockery (right) receives plaque from Senior Joseph Sheppard.

*Board of Governors*

OF THE

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P. O. BOX 2411 - JACKSONVILLE, FLORIDA 32203

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*Executive Committee

DONALD C. JONES, Executive Directo

June 19, 1979

# MEMORANDUM

TO: Presidents and Secretaries
Component County Medical Societies

RE: Summary of Meeting of Board of Governors
June 15 - 16, 1979

The following is a summary of the actions taken by the Board of Governors at its most recent meeting, June 15 - 16, 1979.

**The Board:**

**Ratio of Delegates**

In compliance with provisions of the FMA Bylaws to limit as nearly as possible the House of Delegates to a maximum of 250, the Board changed the number of delegates allowed by county medical societies for the 1980 annual meeting to one (1) delegate for every 50 active members of the association within the society and one (1) for any fraction over and above the last complete unit of 50.

**Annual Meeting**

Approved the general theme of physical fitness for the 1980 annual meeting with other appropriate programs to be determined by the president. The annual meeting will be May 7-11 at the Diplomat Hotel in Hollywood, Florida.

**FMA Future Meeting Dates**

Approved 1980 meeting dates of the Association and voted to continue the policy of holding Board meetings in alternate locations around the state to allow for maximum participation by county medical societies.

| | |
|---|---|
| Exec. Committee | Jan. 11, 1980 |
| Board of Gov. | Jan. 12-13, 1980 |
| Leadership Con. | Jan. 26-27, 1980 |
| Exec. Committee | March 14, 1980 |
| Board of Gov. | March 15-16, 1980 |
| Annual Meeting | May 7-11, 1980 |
| Board of Gov. | May 11, 1980 |
| Exec. Committee | June 13, 1980 |
| Board of Gov. | June 14-15, 1980 |
| Exec. Committee | Oct. 22, 1980 |
| Board of Gov. | Oct. 22-25, 1980 |

**Memorial to Congress**

Requested to Florida Legislature to pass a Memorial to Congress in support of the principles encompassed in Resolution #62 adopted by the AMA House of Delegates in December, 1978 on National Health Insurance.

**Vocational Rehabilitation Program**

Authorized the Florida Medical Foundation to request an opportunity to bid on administration of the State's Vocational Rehabilitation Program.

**FMA Priorities**

Approved the following Association priorities for 1979 - 1980:

**Membership**

Intensify communication with FMA membership directly and through respective county medical and specialty societies.

**Public**

Maximize efforts through public relations programs and speakers bureau, press releases, and "truth squad" to provide public with prompt and responsive Association views on:

a. Cost of Medical Care with special emphasis on what organized medicine is doing to stabilize and reduce cost and on the role government plays in escalating costs.

**Programs**

a. Physical Fitness with special emphasis on life style and nutrition.

b. Continued emphasis on local support for legislative activities and development of active political education programs in cooperation with the FMA Auxiliary in each community.

c. Continued implementation of FMA medical services programs with special emphasis on physical fitness, preventive medicine, emergency medical services, and the public health.

d. Continued efforts to establish statewide voluntary Professional Review Organization (PRO) without Federal Government control and to include private sector (which encompasses Peer Medical Utilization Review).

e. Review by appropriate councils and committees of scope and necessity of existing and contemplated programs within appropriate recommendations to the Board of Governors.

f. Continue to study the development and marketing of a Medical Encounter Data System for members of the Association.

**Association Management**

Insure that Association fiscal status is stable and sound by intensifying efforts to insure Association does not overextend and staff is utilized to achieve program results within budgeted priorities.

Strengthen FMA Branch office activities to provide assistance to county medical societies in areas of public relations, political education, and key contact physician programs.

**Issues**

a. Cost of medical care

b. Formation of a coalition to ascertain the effectiveness of the regionalization of the Department of HRS as it pertains to the public's health.

c. Opposition to any compulsory comprehensive national health insurance program.

d. Health regulatory activities involving interference in practice of medicine.

e. Professional liability

**1979 House of Delegates Referrals**

The 1979 House of Delegates referred several items to the Board for further consideration:

**School Physical Examination**

Requested the Council on Medical Services re-study the subject of the School Physical Examination Form and submit recommendations to the Board.

**Improper Prescription Writing**

Directed that the subject of improper prescription writing be publicized in the FMA *Briefs*.

**Resolution 79-14 Burn Patients**

Referred resolution 79-14 (Transfer of Burn Patients) to the FMA Council on Medical Services for review and recommendations.

**Resolution 79-27 Tuberculin Skin Testing in Jails**

Requested the Committee on Public Health to review the subject of Tuberculin skin testing in jails and make recommendations.

**Resolution 79-1 Impaired Physician Program**

In compliance with the actions of the House of Delegates, the Board approved the President's appointment of an Ad Hoc Committee on Impaired Physicians to study and make recommendations for the establishment of an ongoing statewide impaired physician program and to advise the Auxiliary how they may assist in developing this program.

**Blue Shield Liaison Committee**

The Board approved the President's appointment of a liaison committee to Blue Shield to develop an adequate and effective forum of continued interchange between the two organizations with special attention to the protection of the health insurance needs of the people of Florida.

**1979 Legislative Session**

Commended the Council on Legislation and all those who participated in the 1979 Legislative program for their significant achievement in all major legislative objectives. Special commendation was extended to Dr. James Perry for his outstanding efforts during his tenure as Chairman of the Council.

**State Board of Medical Examiners**

Reviewed names of physicians previously submitted by county medical societies and submitted nominations to the Governor for consideration of appointment to the State Board of Medical Examiners on August 1. The Board will be composed of nine physicians and two lay persons.

**AMA Board of Trustees/Council on Medical Education**

Expressed enthusiastic support for Dr. Joe Von Thron (Cocoa Beach), candidate for election to the AMA Board of Trustees and Dr. Richard G. Connar (Tampa), candidate for election to the Council on Medical Education at the AMA annual meeting in Chicago July 22-26, 1979.

Both Dr. Von Thron and Dr. Connar currently serve as Florida delegates to the AMA.

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# Book Reviews

Book Review Editor

F. Norman Vickers, M.D.

**The Seasons of a Man's Life** by Daniel J. Levinson. 363 pages. Price $5.95. Ballantine Books, New York, 1978. Paperback

What changes occur in a man's life and outlook from age 35 to 50? Are there similar changes and transition periods in each of our lives during this time? These questions have been addressed by Dr. Levinson and colleagues in a ten year study at Yale. Forty suitable candidates from the nearby area were selected. Ten executives and ten workers from two local industries were chosen. For men in academic and creative pursuits, ten biologists and ten novelists were studied.

Levinson divided the life cycle into four approximate 25 year periods including a four to five year transition period between each.

Levinson and colleagues emphasized the importance of "the dream" for success in life. This "dream" influences choice of career, life style, marriage and how a man spends his time and energies. Woven into the book are examples of how "the dream" has influenced famous characters in history and certain wellknown fictional characters. Levinson refers to Elia Kazan's novel *The Arrangement* in which a man at age 40 begins a struggle to regain his lost dream or kill himself. He had been successful as an advertising executive rather than the novelist of his early dream. He and his wife had developed an empty life because he had lost touch with important aspects of his life and could not really love, work or play.

The life of James Baldwin, a black novelist, is referred to briefly as one who pursued his dream over many obstacles in order to attain success as a writer.

Emphasis is also given in this book on the influence of a mentor. Most men had a relationship with another person about fifteen years older, a half generation. This mentor was important in showing them how to get along and succeed in the world. The relationship was apparently mutually beneficial; it usually terminated when it was no longer useful to one or the other. Occasionally, the younger person would find or feel that he was being "used" by the older individual. For example, in the case of a novelist in this study, the young novelist finally felt that he was being used to advance the advisor's career; hence, the relationship ended on bitter terms.

Some chapters deal with the study of a specific individual. They are written in biographical form and illustrate points made by the author and the investigating team. The author is able to demonstrate vividly how various factors — the "dream," the marriage, the career opportunities and mere chance — interact to influence the life of the subject.

For example, the life of Jim Tracy is traced from early childhood through education at Annapolis, World War II, and an early marriage. His job choice as executive, breaking out of one marriage, remarriage, development of a mentor relationship and major job change are covered in vivid, succinct style. The study ends with Tracy at age 46. I found myself wondering what the next chapter might be.

Why publish a study such as this and why review it in these pages? Why didn't *Passages* suffice? *Passages*, a previous bestseller written by a journalist receiving a grant, utilized Levinson's work, in part, for her book. I went back to reread parts of *Passages* in order to answer the question for myself. While the present book is more scholarly and written from the point of view of a psychiatrist, *Passages* is written from the personal viewpoint of a journalist. *Passages* covers a number of subjects superficially whereas, *Seasons* summarizes, in scholarly fashion, a well planned and carefully executed study.

For me, the value of this book is in providing a framework which helps explain some of the events in which we are either personally involved or which we casually observe around us.

F.N.V.

**The Metabolic Management of the Critically Ill** by Douglas W. Wilmore, M.D. 262 Pages. Price $22.50. Plenum Medical Book Company, New York, 1977.

It was with reluctance that I began to review this book. "After all," I reasoned, "can there be that much to know about nutrition?" After reading this book, I'm convinced of the importance nutrition plays in the complete management of any patient.

The book is designed to be a readable handbook, not a major reference. The format consists of questions which also serve as subheadings in the various chapters. These questions are followed by answers which are about one-half to one and one-half pages. The format causes some discontinuity and choppiness but it also defines relatively narrow limits which are answered succinctly.

The content deals with the basics, such as "what is a kilocalorie" and progresses to metabolic physiology and how to deal with patient metabolic needs. The stress of illness and how this interrelates to energy balance, temperature regulation, hormonal interactions, intermediary metabolism and finally the feeding of the patient constitute the thesis of this text. The last chapter details practical methods for utilizing available technology to nourish the patient in such a way to satisfy his particular requirements. A short working "support plan" and work sheets are provided to provide a simple, systematic approach to the individual patient.

There are numerous helpful referenced tables, graphs and lists. Pertinent mathematical equations and their derivations are also provided. The placement of the references at the bottom of each page makes for less efficient reading.

For those interested in heeding this years' FMA challenge to be more informed about patient nutrition and metabolic requirements, this text is an excellent purchase. It is concise and compact, readable and understandable, theoretical and practical, a "mini-" reference and a handbook. This book makes the reader aware of a problem, the pertinent normal and stressed physiology and how the physician may act in a supportive, positive, and rational manner.

Jerrold A. Van Dyke
Gainesville

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Mr. Van Dyke, formerly an Assistant Editor of *The Journal*, presently a resident in Obstetrics and Gynecology, Barnes Hospital, St. Louis, Mo.

# Books Received

**Receipt of the following books is acknowledged. Medical readers interested in reviewing particular books are invited to address requests to the Book Review Editor. Following acceptance of a written review for publication, a reviewer may then retain the book reviewed for his personal or favorite library.**

**Pharmacological and Toxicological Perspective of Commonly Abused Drugs** by Darryl Inaba, Ph.D., E. Leong Way, Ph.D., Kenneth Blum, Ph.D. and Sidney H. Schnoll, M.D. 44 Pages. National Drug Abuse Center, Rosslyn, Virginia, 1978.

**Currents in Alcoholism, Biological, Biochemical, and Clinical Studies,** Edited by Frank A. Seixas, M.D. 601 Pages. Illustrated. Price $31.50. Grune & Stratton, Inc., New York, 1978.

**Controlling the Use of Therapeutic Drugs: An International Comparison** edited by William M. Wardell. 263 Pages. American Enterprise Institute for Public Policy Research, 1978.

**Culture and Commitment, The New Relationships Between the Generations in the 1970's** by Margaret Mead. 177 Pages. Price $2.95. Anchor Press/Doubleday, Garden City, New York, 1978.

**Uses of Enzymes and Immobilized Enzymes** by Francis X. Hasselberger. 220 Pages. Price $14.95. Nelson-Hall Publishers, Chicago, 1978.

**The Chemistry of Human Behavior** by Herbert L. Meltzer, Ph.D. 261 Pages. Illustrated. Price $17.95 (cloth). Nelson-Hall Publishers, Chicago, 1979.

**The Brand-Name Carbo Calorie Diet** by Donald S. Mart. 367 Pages. Price $9.95. Doubleday & Company, Inc., Garden City, New York, 1979.

**Cry Babel, The Nightmare of Aphasia and a Courageous Woman's Struggle to Rebuild Her Life** by April O. Armstrong. 252 Pages. Price $8.95. Doubleday & Company, New York, 1979.

**Annual Review of Neuroscience** with 31 contributing authors. 555 Pages. Annual Reviews, Inc., Palo Alto, California, 1979.

**Norethindrone, The First Three Decades** edited by Mary Jean Pramik. 100 Pages. Syntex Laboratories, Palo Alto, California, 1978.

**Botanical Dermatology** by John Mitchell, M.D. and Arthur Rook, M.D. 787 Pages. Price $39.50. Lea & Febiger, Philadelphia, Penn., 1979.

**Humanhood: Essays in Biomedical Ethics** by Joseph Fletcher. 204 Pages. Price $14.95 (cloth) $6.95 (paper). Prometheus Books, Buffalo, New York, 1979.

**Family Health in an Era of Stress** conducted by Yankelovich, Skelly and White, Inc. 192 Pages (plus packet). General Mills, Inc., Minneapolis, Minnesota, 1979.

# FMA AUXILIARY

# Thirteenth Annual FMA Auxiliary Benefit Art Show

This year the Art Show was the best ever! There were 91 entries and judging was most difficult. The Art Show Chairman, Mrs. James D. Moody (Margaret), of Orlando did an outstanding job with the able assistance of Mrs. John R. Hege (Dot), of Hollywood and Mrs. John Turner (Audrey), of Miami. Mrs. Moody did the superb feat of coordinating the show, keeping records of all entries and seeing that all the art was carefully taken care of until called for. The Journal commends the Chairman and her assistants. The Art Show winners were:

## ADULT DIVISION

### Best of Show

Carol M. Dan — Miami Shores — "Beach House" (Oil Painting)

### Painting Division

1st Place:
Susan Cooksey — Gainesville — Riverscape Painting (mixed media)

2nd Place:
JoEllen Sneed — Ocala — "Maine Lobster" (Watercolor)

Merit Awards:
Dr. Nicholas Mainieri — Lake Park — "Taxco" (Oil)
Catie Cook — Orlando — "Landscape" (Oil)
Janet Heaton — North Palm Beach — "Baby Elephant" (Oil)
Thornton A. Beckner, M.D. — Orlando — "Green Fog" (Oil)

### Graphics Division

1st Place:
Clarence Gilbert, M.D. — Orlando — "Suspended Stairs" (Photography)

2nd Place:
Lynn-Esta Goldman — Miami Beach — "David Bowie"

Merit Awards:
Sandi Jo Gordon — Miami Lakes — "Summer Shadows #2"
Elaine Kahn — Hollywood — (Etching)

**Crafts Division**

1st Place:
Stanley S. Goodman, M.D. — Fort Lauderdale — "Stable Polarity" (Carrara Marble Sculpture)

2nd Place:
Sarah Wiggins — Gainesville — "Artichoke" (Wallhanging)

Merit Awards:
Lynn-Esta Goldman — Miami Beach — "Cameo" (Scrimshaw)
Nicholas Petkas, M.D. — Park Lake — "Beginnings" (Onyx Sculpture)

**Editor's Award**

Catie Cook (Mrs. Thomas) — Orlando — "Shannon"

## YOUTH DIVISION

**Best of Show**

Margery Gordon — Age 6 — Miami Lakes (Oil)
Daughter of Dr. and Mrs. Mark Gordon

**Painting Division**

1st Place:
Mary Money Roberson — Age 11 — Ormond Beach — "Hyacinths"
Daughter of Dr. and Mrs. Shed Roberson

2nd Place:
Courtney Hollis — Age 11 — Ormond Beach — (Acrylic Painting)
Son of Dr. and Mrs. Bob Hollis

**Graphics Division**

1st Place:
Andrea Gordon — Age 8 — Miami Lakes — "American Flag"
Daughter of Dr. and Mrs. Mark Gordon

2nd Place:
Kathy Tignor — Age 12 — North Palm Beach — "Scratch Board" (Still Life)
Daughter of Dr. and Mrs. Milton Tignor

Merit Awards:
Franz Stewart — Age 14 — Miami — "The Rain Pipe" (Photography)
Son of Dr. and Mrs. Franz Stewart Jr.
John Foley — Age 15 — Indialantic — "Florida's Capitol" (Photography)
Son of Dr. and Mrs. Michael Foley

**Crafts Division**

2nd Place:
Joan Von Thron — Age 12 — Cocoa Beach — (Stained Glass)
Daughter of Dr. and Mrs. Joseph Von Thron

**Alan M. Blum, M.D., of Miami** . . . has been named a recipient of the third Dr. Morris Fishbein Fellowship in Medical Journalism at the American Medical Association. The program is named in honor of the late Dr. Fishbein, longtime Editor of *The Journal of the American Medical Association* and prolific writer of medical articles for the lay press.

Dr. Blum, Chief Resident in Family Medicine at the University of Miami School of Medicine, is a founder of a community-wide preventive medicine program called DOC (Doctors Ought to Care).

A graduate of Emory University School of Medicine, he writes and broadcasts a daily radio health commentary and is host of a three-hour interview and call-in program each Sunday. He was elected to the AMA's Resident Physicians Section Governing Council.

Dr. Deal

**William B. Deal, M.D.**. . . . of Gainesville, has received a Distinguished Service Award from the University of North Carolina School of Medicine.

Dr. Deal, Vice President for Health Affairs and Dean of the University of Florida College of Medicine, was one of five alumni and former faculty to be cited during a banquet commemorating the School's 100th Anniversary on February 9. Awards were presented by Dr. Christopher Fordham, Vice Chancellor for Health Affairs and Dean of the UNC School of Medicine.

Dr. Deal received his A.B. degree at North Carolina in 1958, earning his M.D. there five years later. He shifted to the University of Florida for internship, residency and fellowship training, joining the faculty as Assistant Professor in 1970.

Last year, he was named to his present positions at the Univeristy of Florida.

**Jaime L. Frias, M.D., and Parker A. Small, M.D.** . . . have been named "Teachers of the Year" at the University of Florida College of Medicine.

Dr. Frias, Professor and Chief of Pediatric Genetics, teaches genetics to first-year medical students and classes in pediatric genetics and genetics and metabolism to advanced students.

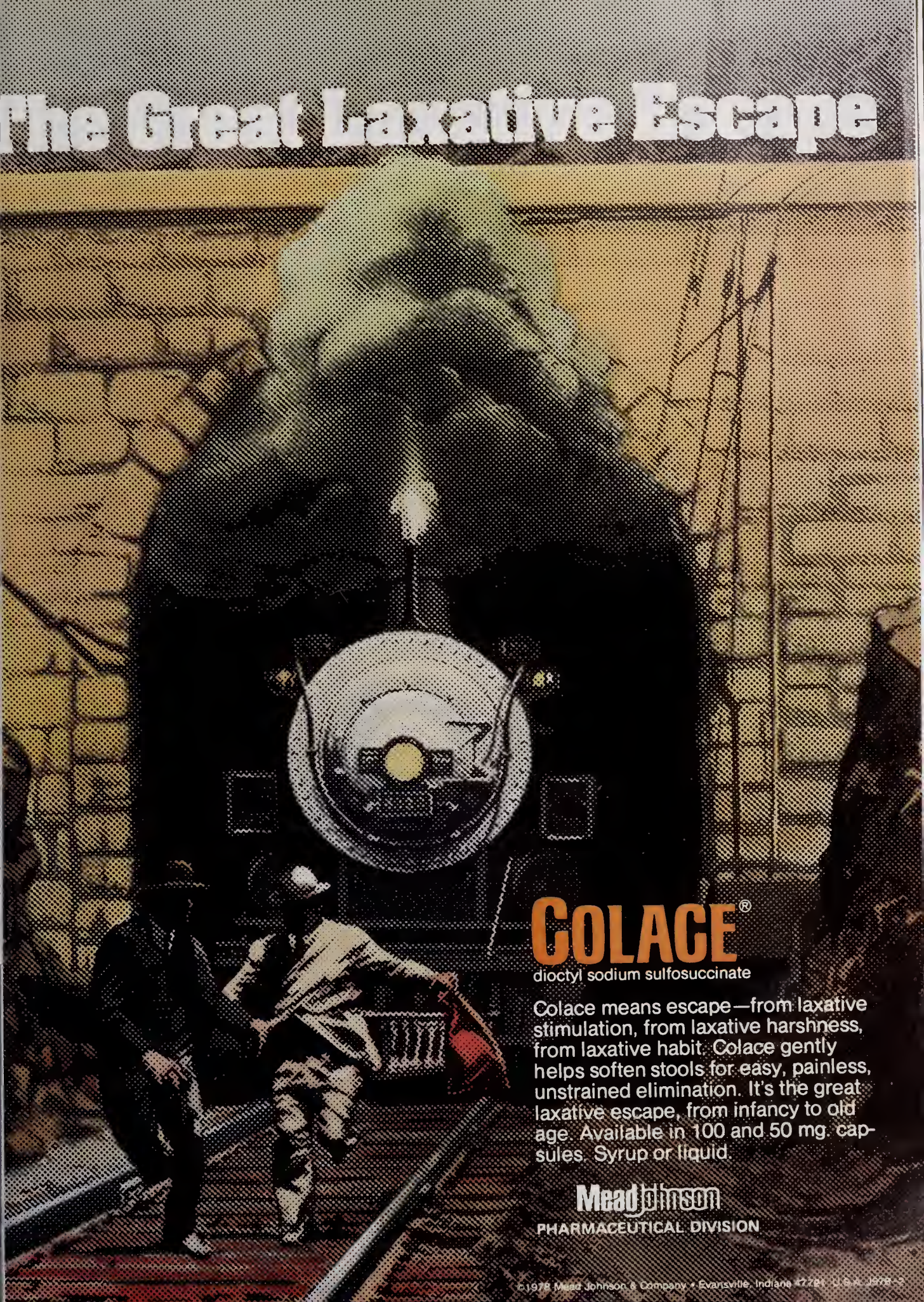
As Professor of Immunology and Medical Microbiology, Dr. Small teaches immunology at the first-year medical school and the graduate levels.

**Three Florida physicians** . . . have been admitted as Fellows of the American College of Cardiology. They are: Matthew L. Carr, M.D., Pompano Beach; Jaime Llobet, M.D., Miami; and Stanley E. Richter, M.D., Tamarac.

Dr. Simons

**Robert L. Simons, M.D., of Miami Beach** . . . has been elected Treasurer of the American Academy of Facial Plastic And Reconstructive Surgery. He was chosen at the organizations Annual Meeting in New Orleans in April.

Dr. Simons is a Clinical Assistant Professor of Otolaryngology at the University of Miami School of Medicine. He has served the Academy as national program chairman and southern regional vice president.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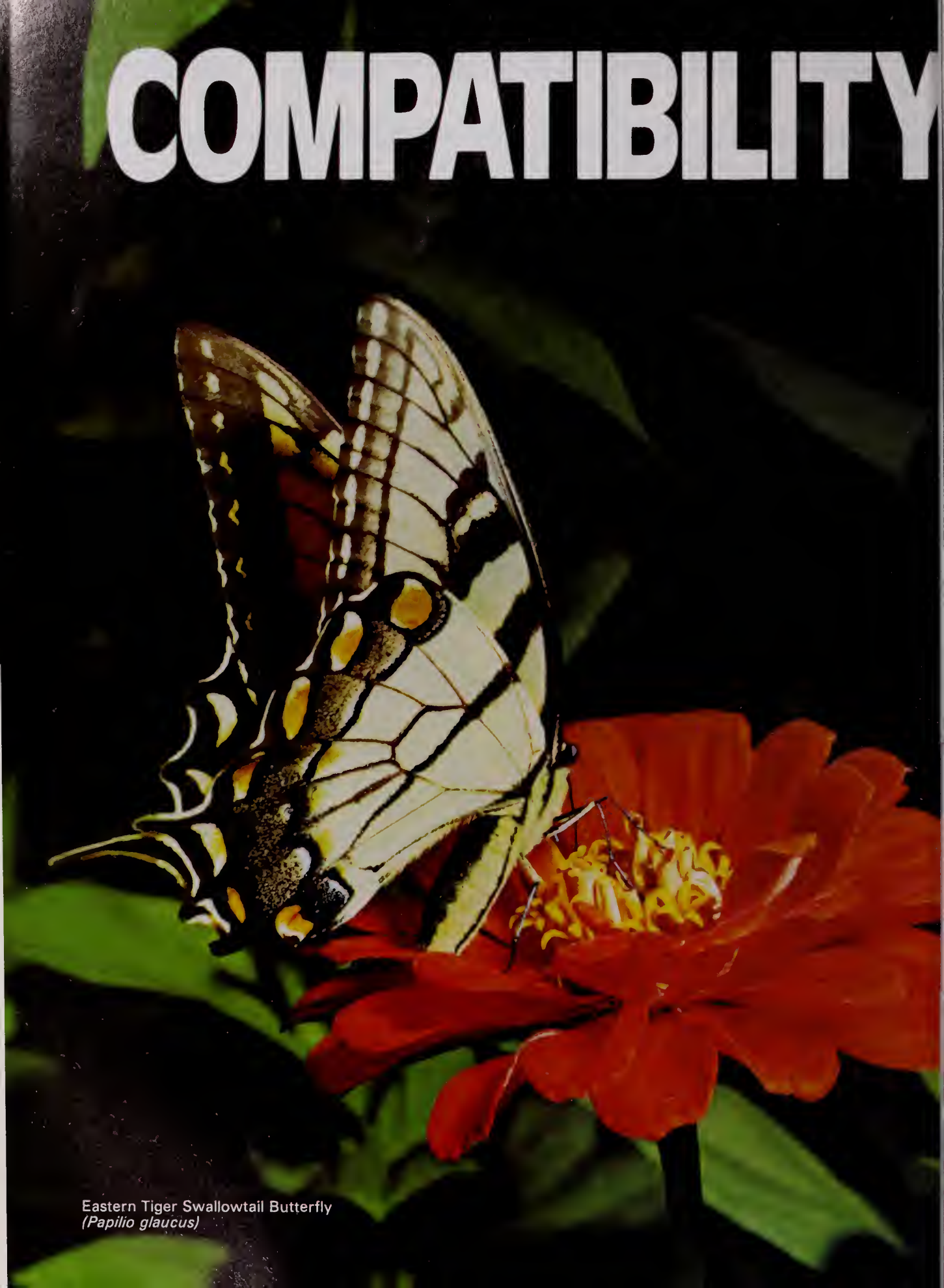
# COMPATIBILITY



Eastern Tiger Swallowtail Butterfly
*(Papilio glaucus)*

# Does it influence your choice of a peripheral/cerebral vasodilator*?

## Vasodilan–compatible with coexisting diseases (e.g., glaucoma, diabetes)

Vasodilan has not been reported to affect the course of coexisting disease; it has not been reported to affect blood sugar levels or to raise intraocular pressure.

## Vasodilan–compatible with concomitant therapy

Vasodilan has not been reported to affect the treatment of coexisting disease; it is compatible with such drugs as hypoglycemics and miotics.

## Vasodilan–compatible with your total regimen for vascular insufficiency

Vasodilan can be a valuable adjunct in planning a total therapeutic program for vascular insufficiency.

***Indications:** Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, the FDA has classified the indications as follows:

Possibly Effective:

1. For the relief of symptoms associated with cerebral vascular insufficiency
2. In peripheral vascular disease of arteriosclerosis obliterans, thromboangiitis obliterans (Buerger's Disease) and Raynaud's disease.

Final classification of the less-than-effective indications requires further investigation.

**Composition:** Vasodilan tablets, isoxsuprine HCl, 10 mg. and 20 mg.
Vasodilan injection, isoxsuprine HCl, 5 mg., per ml.

**Dosage and Administration:** Oral: 10 to 20 mg., three or four times daily.
Intramuscular: 5 to 10 mg. (1 or 2 ml.) two or three times daily. Intramuscular administration may be used initially in severe or acute conditions.

**Contraindications and Cautions:** There are no known contraindications to oral use when administered in recommended doses. Should not be given immediately postpartum or in the presence of arterial bleeding.

Parenteral administration is not recommended in the presence of hypotension or tachycardia.

Intravenous administration should not be given because of increased likelihood of side effects.

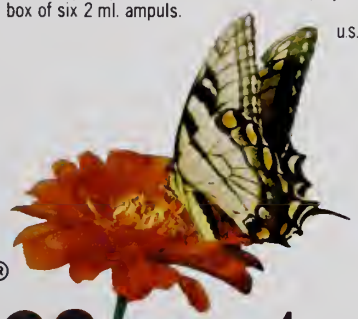
**Adverse Reactions:** On rare occasions oral administration of the drug has been associated in time with the occurrence of hypotension, tachycardia, nausea, vomiting, dizziness, abdominal distress, and severe rash. If rash appears the drug should be discontinued.

Although available evidence suggests a temporal association of these reactions with isoxsuprine, a causal relationship can be neither confirmed nor refuted.

Administration of single dose of 10 mg. intramuscularly may result in hypotension and tachycardia. These symptoms are more pronounced in higher doses. For these reasons single intramuscular doses exceeding 10 mg. are not recommended. Repeated administration of 5 to 10 mg. intramuscularly at suitable intervals may be employed.

**Supplied:** Tablets, 10 mg., bottles of 100, 1000, 5000 and Unit Dose; Tablets, 20 mg., bottles of 100, 500, 1000, 5000 and Unit Dose; Injection, 10 mg. per 2 ml. ampul, box of six 2 ml. ampuls.

U.S. Pat. No. 3,056,836



# VASODILAN® 20-mg tablets

## (ISOXSUPRINE HCl)

**20 mg q.i.d. recommended dosage**

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# This asthmatic isn't worried about his next breath...

## he's active he's effectively maintained on

# QUIBRON®

Each capsule or tablespoonful (15 ml) liquid contains theophylline (anhydrous) 150 mg and glyceryl guaiacolate (guaifenesin) 90 mg

- theophylline for effective around-the-clock bronchodilator therapy
- 100% free theophylline

**Indications:** For the symptomatic relief of bronchospastic conditions such as bronchial asthma, chronic bronchitis, and pulmonary emphysema.
**Warnings:** Do not administer more frequently than every 6 hours, or within 12 hours after rectal dose of any preparation containing theophylline or aminophylline. Do not give other compounds containing xanthine derivatives concurrently.
**Precautions:** Use with caution in patients with cardiac disease, hepatic or renal impairment. Concurrent administration with certain antibiotics, i.e., clindamycin, erythromycin, troleandomycin, may result in higher serum levels of theophylline. Plasma prothrombin and factor V may increase, but any clinical effect is likely to be small. Metabolites of guaifenesin may contribute to increased urinary 5-hydroxyindoleacetic acid readings, when determined with nitrosonaphthol reagent. Safe use in pregnancy has not been established. Use in case of pregnancy only when clearly needed
**Adverse Reactions:** Theophylline may exert some stimulating effect on the central nervous system. Its administration may cause local irritation of the gastric mucosa, with possible gastric discomfort, nausea, and vomiting. The frequency of adverse reactions is related to the serum theophylline level and is not usually a problem at serum theophylline levels below 20 mcg/ml.
**How Supplied:** Capsules in bottles of 100 and 1000 and unit-dose packs of 100; Liquid in bottles of 1 pint and 1 gallon.
*See package insert for complete prescribing information.*

**Mead Johnson** PHARMACEUTICAL DIVISION

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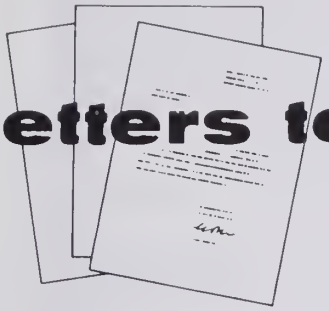

# Letters to the Editors

## MORE ABOUT THE CADUCEUS

**To the Editor:** We might as well get a last word in in reply to "The Origin of the Caduceus," (JFMA, March 1979). Aesculapius became so skilled that he could restore the dead to life. In ancient days the serpent was the symbol of health, because it could shed its skin and appear young again. Therefore its appearance on the staff.

*James S. Grable, M.D.*
*Tampa*

## A LEARNING PROCESS

**W. Harold Parham, D.H.A.**
**Executive Vice-President**
**Florida Medical Association, Inc.**
**Jacksonville**

**Dear Dr. Parham:**

As the student delegate from Alachua County to the 1979 FMA House of Delegates, I wish to take this opportunity to thank the membership of the FMA for their financial support of my trip.

The past week was an excellent learning experience for me, and I hope that in some small way, my presence was of some value to the FMA, not only as a voting delegate, but also as a reciprocal learning experience.

I wholeheartedly feel that this is a program which the FMA should continue to actively support and even expand. Medical students are almost totally uninformed as to the nature of the activities of organized medicine as represented by the FMA. Ignorance breeds misunderstanding and anything that can be done to remove the walls of ignorance is highly commendable.

*Steven J. Westgate*
*Gainesville*

*(Editor's Note: Mr. Westgate is a student Consulting Editor of The Journal)*

## MEDIATION PANELS

*(Editor's Note: The following exchange of letters between Walter C. Jones III, M.D., President of the Dade County Medical Association, and Circuit Judge Arden M. Siegendorf of Miami is self-explanatory and of timely interest to FMA members. Names of some of the principals in the matter have been deleted. The Journal is grateful to Dr. Jones and Judge Siegendorf for granting permission to publish these letters.)*

March 13, 1979

**Judge John Gale**
**Dade County Courthouse - 12th Floor**
**73 West Flagler Street**
**Miami, Florida**

**Dear Judge Gale:**

I am enclosing a copy of a subpoena which I received for my appearance on a medical mediation panel. I arrived at Judge Siegendorf's office at 10 a.m. this morning and was told that the panel had been cancelled.

My secretary had called the clerk of the mediation panel at 4:30 p.m. on the afternoon of March 12th and we were told that the panel was still going.

After I was informed while at the courthouse that this had been cancelled I called the clerk, and she told me she was just notified on the morning of March 13th a short time before I arrived in Court.

What bothers me is that Judge Siegendorf's secretary knew that this was cancelled on the afternoon of March 12th, and this was a much earlier time than when the clerk was notified to notify the panel.

As President of Dade County Medical Association this year, one of the things I have been earnestly trying to do is to request doctors to serve on mediation panels. As you know, you have had trouble getting some physicians to take this responsibility. I do not feel this way. I had cancelled a full day of surgery and office work in order to appear at this panel.

I hope in the future that things such as this can be straightened out or the whole mediation system is going to collapse. Perhaps this is what the plaintiff's attorneys want, as I am told that it was the plaintiff's attorney that notified Judge Siegendorf's office that the panel was cancelled. He did not have the courtesy to notify my office.

As the President of the Medical Association I would be happy to work with you as Administrative Judge or any other interested legal parties in order that we can continue a legal system that the physicians can support.

*Sincerely yours,*
*Walter C. Jones III, M.D.*
*Coral Gables*

March 20, 1979

**Walter C. Jones, III, M.D.**
**Coral Gables Orthopaedic Associates**
**4675 Ponce de Leon Boulevard**
**Coral Gables, Florida 33146**

**Dear Dr. Jones:**

Thank you for sending me a copy of your letter dated March 13, 1979, to Administrative Judge John Gale, regarding the above case. You are 100% correct in your critique and I join your call for improvements in the system. My views are set forth below.

My secretary states that on the afternoon of March 12, 1979, Dr. _____ called and advised her that a Mediation Panel was not necessary as he did not intend to proceed. Dr. _____ told her that he would request the Mediation Clerk to notify the panel members not to appear the following morning, March 13th. He also told my secretary that he would notify the witnesses not to appear, (I was home the afternoon of March 12th recovering from recent knee surgery. After Dr. _____'s phone call, my secretary called me to advise of the cancellation. Therefore, I did not go to my office as you did on the morning of the 13th). Apparently, Dr. _____ failed to timely notify the Mediation Clerk or the panel members of the cancellation.

There is no good reason why lawyers cannot notify panel members of settlements or cancellation of mediation cases prior to final hearing. Furthermore, attorneys should not request special settings of mediation until they are *certain* they intend to present evidence. See *Herrera v. Doctors Hospital,* S. Ct., Case No. 53,559, not yet reported.

I intend to pursue this matter and see that it does not recur. Please let me have your thoughts.

*Very truly yours,*
*Arden M. Siegendorf*
*Judge, Eleventh Judicial Circuit of Florida*
*Miami*

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# HOLD THESE DATES!!!

**SEPTEMBER 12-13-14, 1979**
*"PROGRESS IN CARDIOLOGY — 1979"*
Wolfson Auditorium at Mount Sinai Medical Center
Program Chairman — Philip Samet, M.D.

**OCTOBER 15-19, 1979**
*"FIFTH PANAMERICAN MEDICAL SEMINAR"*
*(Totally in Spanish)*
Wolfson Auditorium at Mount Sinai Medical Center
Program Chairman — Federico R. Justiniani, M.D.

**NOVEMBER 28, 1979**
*"PERPLEXING CARDIAC ARRHYTHMIAS IN PRIVATE PRACTICE"*
Wolfson Auditorium at Mount Sinai Medical Center
Program Chairmen — Marvin L. Meitus, M.D., and Neil Schneider, M.D.
Co-sponsored by The American Heart Association of Greatear Miami

**DECEMBER 5, 1979**
*"SLEEP DISORDERS UPDATE"*
Wolfson Auditorium at Mount Sinai Medical Center
Program Chairman — Martin A. Cohn, M.D.

For further information please write or call:
CME COORDINATOR AT MOUNT SINAI MEDICAL CENTER
4300 ALTON ROAD, MIAMI BEACH, FLORIDA 33140
TELEPHONE — (305) 674-2311

## INFORMATION FOR AUTHORS

Manuscripts should be submitted to the Editor of the Journal, Florida Medical Association, P.O. Box 2411, Jacksonville, Florida 32203, in original and one duplicate copy. Copy should be typewritten and double spaced.

**Author Responsibility.** The author is responsible for all statements made in his work, including changes made by copy editor. Manuscripts are received with the understanding that they are not simultaneously under consideration by any other publication. Rejected manuscripts are returned to the author. Accepted manuscripts become the property of the Journal and may not be published elsewhere without permission from the author and the Journal.

Each of the following should begin on a new page: synopsis-abstract, first page of text, legends for illustrations, tables and acknowledgments. Each page should include a running head and surname of senior author.

**Synopsis-Abstract.** All manuscripts should include a 150 word, maximum length, synopsis-abstract which is a factual (not descriptive) summary of the work. This replaces the summary and precedes your article.

Title should be short, specific, clear and amenable to indexing.

List affiliations for each author. If author's present affiliation is different from affiliation under which the work is done, both should be given.

**References.** The following minimum data should be given: names of all authors, complete title of article cited, name of journal abbreviated according to **Index Medicus,** volume number, page numbers and year of publication. All references must be cited in text and should be arranged according to order of citation and numbered consecutively. If references are too numerous, we reserve the right to eliminate with notation: References are available from the author(s) upon request.

All accepted manuscripts are subject to copy editing. Authors receive a galley proof for approval before publication. No changes are accepted after galley is returned. Forms for ordering reprints are included with the galley proofs.

**Illustrations.** Illustrations are all material which cannot be set in type such as photographs, line drawings, graphs, charts and tracings. The entire cost of reproducing color illustrations is the responsibility of the author(s). Omit all illustrations which fail to increase understanding of text. Drawings and graphs should be done with India ink on white paper. Select overall proportions appropriate for material presented and sufficient for reduction, if necessary. Each illustration should be numbered and cited in the text. Legends should be typed, double-spaced on separate sheet of paper. The following information should be typed on an adhesive strip and affixed to back of illustration: figure number, title of manuscript, name of author and arrow indicating top. Tables should be self-explanatory and should supplement, not duplicate, the text. Number tables consecutively, beginning with 1. Each table must have a title.

**Permission letters** must accompany patient photos whenever there is a possibility of identification. Prepare in accordance with state laws and specify authority to publish.

**Letters submitted** for publications should be designated "For Publication."


**Tenuate® ⓒ**
(diethylpropion hydrochloride NF)

**Tenuate Dospan®**
(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION
Brief Summary
**INDICATION**: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.
**CONTRAINDICATIONS**: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).
**WARNINGS**: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. *Drug Dependence*: Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy*: Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children*: Tenuate is not recommended for use in children under 12 years of age.
**PRECAUTIONS**: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.
**ADVERSE REACTIONS**: *Cardiovascular*: Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System*: Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal*: Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic*: Urticaria, rash, ecchymosis, erythema. *Endocrine*: Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System*: Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous*: A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.
**DOSAGE AND ADMINISTRATION**: Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in midevening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.
**OVERDOSAGE**: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.
Cayey, Puerto Rico 00633
*Direct Medical Inquiries to*
MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
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**References**: 1. Citations available on request—Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M.: A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

**Merrell**

8-3921 (Y587A)

# Overweight may not always be simple... complications can develop.*

# Complicated or not...

# Tenuate® Dospan® ℃

## (diethylpropion hydrochloride NF)

**75 mg. controlled-release tablets**

### A useful short-term adjunct in an indicated weight loss program.

Overweight patients in certain diagnostic categories often require strict appetite control and a successful program of weight reduction may tend to diminish the incidence or severity of the complications in some patients. Diethylpropion hydrochloride has been reported useful in such patients and while it is not suggested that Tenuate itself in any way reduces the complications of overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. **Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.**

### In uncomplicated overweight.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

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The anorectic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.[1] And the unique chemistry of Tenuate provides "...anorectic potency with minimal overt central nervous system or cardiovascular stimulation."[2] Compared with the amphetamines, diethylpropion has minimal potential for abuse.

## Tenuate—it makes sense. And it's responsible medicine.

*Studies have shown that obesity is associated with an increased incidence of hypertension, symptomatic heart disease, adult-onset diabetes, and other diseases.

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For prescribing information see opposite page.

# new 600 mg tablets

# Motrin®

## ibuprofen, Upjohn

More convenient for some of your patients.

Now there are three Motrin tablet strengths to choose from- 600 mg, 400 mg, and 300 mg

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J-6999-4

April 1979

# Tagamet®

brand of

## cimetidine

**How Supplied:**
Pale green 300 mg. tablets
in bottles of 100 and Single Unit Packages of 100
(intended for institutional use only).
Injection, 300 mg./2 ml.,
in single-dose vials
and in 8 ml. multiple-dose vials,
both in packages of 10.

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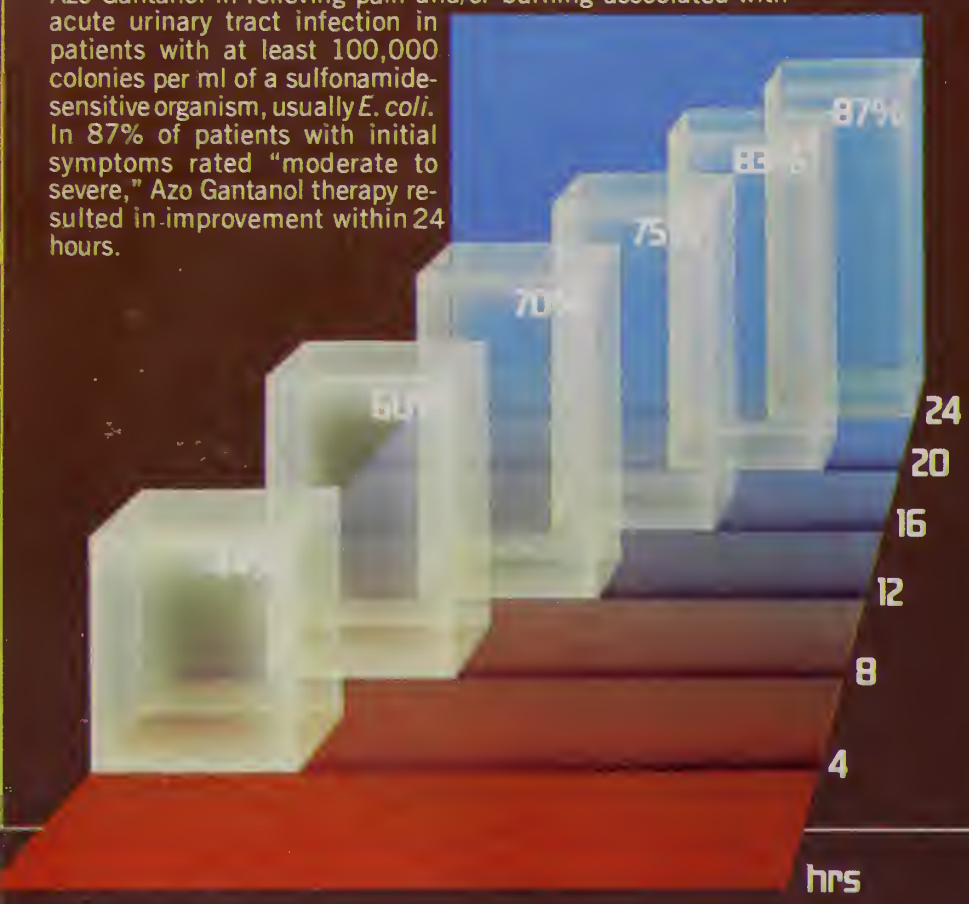
## Important data on the pain of acute cystitis:

# In 87% of patients studied (303 of 349), Azo Gantanol® reduced pain and/or burning within 24 hours*

A controlled, multicenter study assessed the efficacy of Azo Gantanol in relieving pain and/or burning associated with acute urinary tract infection in patients with at least 100,000 colonies per ml of a sulfonamide-sensitive organism, usually *E. coli*. In 87% of patients with initial symptoms rated "moderate to severe," Azo Gantanol therapy resulted in improvement within 24 hours.




## Fast pain relief plus effective antibacterial action

# Azo Gantanol®

Each tablet contains 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl.

**for the pain** **for the pathogens**

*Data on file, Hoffmann-La Roche, Inc., Nutley, New Jersey 07110.

**Before prescribing, please consult complete uct information, a summary of which follows:**

**Indications:** In adults, urinary tract infection complicated by pain (primarily pyelonephriti pyelitis and cystitis) due to susceptible orga (usually *E. coli, Klebsiella-Aerobacter, Staph coccus aureus, Preteus mirabilis*, and, less f quently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. **Note: fully coordinate *in vitro* sulfonamide sensitivi tests with bacteriologic and clinical response aminobenzoic acid to follow-up culture medi increasing frequency of resistant organisms the usefulness of antibacterials including sul fonamides.** Measure sulfonamide blood level variations may occur; 20 mg/100 ml should maximum total level.

**Contraindications:** Children below age 12; su fonamide hypersensitivity; pregnancy at term during nursing period; because Azo Gantanol tains phenazopyridine hydrochloride it is con dicated in glomerulonephritis, severe hepatit uremia, and pyelonephritis of pregnancy with disturbances.

**Warnings:** Safety during pregnancy not establ Deaths from hypersensitivity reactions, agran tosis, aplastic anemia and other blood dyscra have been reported and early clinical signs (s throat, fever, pallor, purpura or jaundice) ma dicate serious blood disorders. Frequent CBC urinalysis with microscopic examination are r ommended during sulfonamide therapy.

**Precautions:** Use cautiously in patients with i paired renal or hepatic function, severe alle bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria a stone formation.

**Adverse Reactions:** *Blood dyscrasias* (agranulocytosis, aplastic anemia, thrombocytopeni leukopenia, hemolytic anemia, purpura, hypo thrombinemia and methemoglobinemia); *alle reactions* (erythema multiforme, skin eruptio Stevens-Johnson syndrome, epidermal necrol urticaria, serum sickness, pruritus, exfoliativ dermatitis, anaphylactoid reactions, periorbit edema, conjunctival and scleral injection, ph sensitization, arthralgia and allergic myocardi *G.I. reactions* (nausea, emesis, abdominal pa hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); *CNS reactions* (headache, periph neuritis, mental depression, convulsions, atax hallucinations, tinnitus, vertigo and insomnia *miscellaneous reactions* (drug fever, chills, to nephrosis with oliguria and anuria, periarteriti nodosa and L. E. phenomenon). Due to certai chemical similarities with some goitrogens, di uretics (acetazolamide, thiazides) and oral hy glycemic agents, sulfonamides have caused r instances of goiter production, diuresis and h glycemia. Cross-sensitivity with these agents exist.

**Dosage:** Azo Gantanol is intended for the acut painful phase of urinary tract infections. *Usua adult dosage:* 2 Gm (4 tabs) initially, then 1 G (2 tabs) B.I.D. for up to 3 days. If pain persist causes other than infection should be sought. After relief of pain has been obtained, contin treatment with Gantanol (sulfamethoxazole) m be considered.

*NOTE:* Patients should be told that the orange dye (phenazopyridine HCl) will color the urine.

**Supplied:** Tablets, red, film-coated, each con ing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl—bottles of 100 and 500

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# MEETINGS

## Approved by the FMA Committee on Continuing Medical Education

### AUGUST

**ECG Interpretation & Arrhythmia Management,** Aug. 17-19, Orlando Hyatt, Orlando. For information: William E. James, Ph.D., 64 Inverness Dr., E., Englewood, Colorado 80112.

**Second Annual Innovations in Medical Care,** Aug. 25-26, Sandestin Resort, Sandestin. For information: Sandra Knight, 812 W. 11th St., Suite C, Panama City 32401.

**Laparoscopy Course,** Aug. 27-28, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th St., Jacksonville 32209.

**Pediatrics — Drug Use, Misuse and Emergency Use,** Aug. 31-Sept. 1, Sacred Heart Children's Hospital, Pensacola. For information: Richard D. Nauman, M.D., 5149 North 9th Ave., Sutie 307, Pensacola 32504.

### SEPTEMBER

**Second Annual South East Pediatric Educational Conference of Florida,** Sept. 1-3, Cancun, Mexico. For information: Gerald T. Kilpatrick, M.D., 531 U.S. Highway #1, North Palm Beach 33408.

**17th Annual Seminar in Cardiology,** Sept. 4-11, London, England. For information: Henry J. L. Marriott, M.D., St. Anthony's Hospital, St. Petersburg 33705.

**Selected Topics in Surgical Oncology,** Sept. 8-9, Holiday Inn (The Casino), Pensacola Beach. For information: Richard D. Nauman, M.D., 5149 North 9th Ave., Suite 307, Pensacola 32504.

**Progress in Cardiology — 1979,** Sept. 12-14, Mt. Sinai Medical Center, Miami Beach. For information: CME Coordinator, Mt. Sinai Medical Center, 4300 Alton Road, Miami Beach 33140.

**A Basic A.S.I.F. Course on Treatment of Fractures and Non-Unions,** Sept. 12-15, Flag Pavilion, Jacksonville Beach. For information: Marshall Horowitz, M.D., 655 West 8th Street, Jacksonville 32209.

**Laparoscopy Course,** Sept. 24-25, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th St., Jacksonville 32209.

**Florida Society of Clinical Hypnosis Annual Workshop in Basic and Advanced Hypnosis,** Sept. 28-30, Bay Harbor Inn, 7700 Courtney Campbell Causeway, Tampa. For information: C. Mutter, M.D., 3661 South Miami Avenue, Suite 308, Miami 33133.

### OCTOBER

**Office Management Hypertension,** Oct. 3, Holiday-Inn—University Center, Gainesville.**

**19th Workship in Electrocardiography,** Oct. 4-8, Clearwater Beach. Henry J. L. Marriott, M.D., St. Anthony's Hospital, St. Petersburg 33705.

**Hyperalimentation in Modern Hospital Practice,** Oct. 9, Manatee Memorial Hospital, Bradenton. For information: Leonides Y. Teves, M.D., 706 39th St. W., Bradenton 33505.

**Radiology for the Emergency and Primary Care Physicians,** Oct. 10-14, Sahara Hotel, Las Vegas, Nevada. For information: W. T. Haeck, M.D., 3900 N.W. 79th Ave., Suite 469, Miami 33166.

**Fifth Panamerican Seminar,** Oct. 15-19, Wolfson Auditorium, Miami Beach. For information: Federico R. Justiniani, M.D., 4300 Alton Road, Miami Beach 33140.

**Mercy Hospital Cardiovascular Symposium,** Oct. 18-20, OMNI International Hotel, Miami.*

**Current Concepts in Pulmonary & Infectious Diseases,** Oct. 19-20, Holiday Inn (The Casino), Pensacola Beach. For information: Richard D. Nauman, M.D., 5149 North 9th Ave., Suite 307, Pensacola 32504.

**Obstetrics and Gynecology Review Course,** Oct. 20-27, Royal Biscayne Beach Hotel & Racquet Club, Key Biscayne.*

**Ob-Gyn Pathology Course,** Oct. 27-28, Royal Biscayne Beach Hotel & Racquet Club, Key Biscayne.*

**Laparoscopy Course,** Oct. 29-30, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th Street, Jacksonville 32209.

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***For information: Contact Division of Continuing Medical Education, D23-3, University of Miami School of Medicine, P.O. Box 016960, Miami 33101. Tel. (305) 547-6716.**

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# U. S. ARMY MEDICAL DEPARTMENT

# ARMY FIRST YEAR GRADUATE MEDICAL EDUCATION

## GENERAL

The Army Medical Department (AMEDD) represents the largest comprehensive system of health care in the United States. Within one centrally directed system, the medical disciplines of patient care, preventive medicine, research, education, and administration are coordinated to provide a unified system of health care for approximately three and one-half million people including Active Army personnel, their dependents, as well as retired military personnel and their dependents.

During the summer of 1980, the Army is offering a large number of First Year Graduate Medical Education (FYGME) positions. Previously, most positions were filled by participants in the US Army Health Professions Scholarship Program (HPSP). However, for training beginning in July 1980, the Army will be actively seeking qualified civilian applicants who have no current Army affiliation.

## DESCRIPTION

Army medical training programs are among the best in the nation. All are approved by the Liaison Committee on Graduate Medical Education of the American Medical Association. Virtually all recognized residencies are offered. Most Army training facilities are affiliated with a medical school. Medical centers and hospitals are well equipped with laboratory, medical, surgical, radiological, library and other requisite facilities. Medical records keeping is excellent.

All patients are available as teaching patients. The range of cases, both in age and complexity, is virtually impossible to duplicate. Because of the scope of the Army's activities and its highly sophisticated evacuation system, you will have the chance to see and study diseases you would never encounter in most programs. Furthermore, you have no worry about your patient's ability to pay.

**The following Army FYGME programs are offered:**

(1) **Flexible.** The flexible FYGME program is designed as a year of broad medical education prior to pursuing a specialized residency or as a program for individuals as yet undecided about further specialization. Four months of medicine are required in this program along with additional requirements and electives that vary slightly from teaching center to teaching center.

(2) **Categorical.** Categorical programs are offered in medicine, surgery, obstetrics/ gynecology, pathology, pediatrics, physical medicine, and family practice. The majority of the 12 month period is spent on the service concerned or in related areas and is considered by most of the appropriate specialty boards as the first year of residency training.

(3) **Categorical diversified.** These programs are essentially a combination of the above two and are offered in radiology, psychiatry, neurology, and anesthesiology. The primary emphasis is upon the major specialty with additional required and elective rotations on other services.

To find out more information concerning this program, the eligibility criteria, service obligation, benefits and application procedures contact the AMEDD Personnel Counselor serving your area.

**Deadline** for applications is **1 September 1979.** All applicants are encouraged to also participate in the NIRMP. Sections for the Army FYGME Program will be announced in sufficient time for selectees to withdraw from the NIRMP.

*AN EQUAL OPPORTUNITY EMPLOYER*

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# Mental retardation can happen to anyone.

# It can happen to you!

## But you can prevent mental retardation.

To find out how, write:
National Association for Retarded Citizens,
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## FAMILY PRACTITIONERS

FAMILY PRACTITIONER. Growing community in northeast Florida offers immediate opportunity to establish private practice. Excellent schools, beautiful beaches, year-round outdoor recreation. Contact: Claude Weeks, Executive Director, Flagler Hospital, P.O. Box 100, St. Augustine, Florida 32084. Phone: (904) 824-8411.

FAMILY PRACTITIONER OR INTERNIST wanted to share facilities with three practitioners in solo practice. Major equipment provided. Rent $250 per month. Competent laboratory and x-ray departments with income based on use. Bookkeeping system and receptionist shared. Contact: T. C. Kenaston Jr., M.D., P.O. Box 550, Cocoa, Florida 32922.

WANTED: County Health Department Physician to carry out Detox Center Services and Primary Care Services in clinics. 40 hour week. Excellent salary, plus benefits of sick and annual leave, hospitalization, life insurance, social security and retirement. Call: S. D. Rowley, M.D., Director, Duval County Health Department, Jacksonville (904) 633-2280.

## SPECIALISTS

CENTRAL FLORIDA MULTI-SPECIALTY CLINIC HAS OPENING for second general surgeon. Good financial opportunity; new well equipped office near three hospitals. Write C-893, P.O. Box 2411, Jacksonville, Florida 32203.

EMERGENCY PHYSICIAN with postgraduate training or three years experience for prestigious University General Hospital in Tampa, Florida. 600 beds, 45,000 plus visits per year with new 17,000 square feet Emergency Department. Guaranteed income for 45 hours per week with two weeks education leave and two weeks vacation. Malpractice paid. Send curriculum vitae, three letters of recommendation to: Philip J. Fagan Jr., M.D., P.O. Box 9639-FL, Marina del Rey, California 90291. Phone: (213) 822-1312.

EXCELLENT OPENING for energetic, Board Certified or Board Eligible Internist, with or without subspecialty in Rheumatology or Neurology for fast growing area in coastal Southwest Florida. Must desire solo practice; ample coverage. Write C-885, P.O. Box 2411, Jacksonville, Florida 32203.

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MULTISPECIALTY GROUP OF PHYSICIANS located in North Florida seeking to expand in the following specialties: Rheumatology, Gastroenterology, Hematology/Oncology, Endocrinology, and Infectious Diseases. Please send curriculum vitae to: C-928, P.O. Box 2411, Jacksonville, Florida 32203.

EMERGENCY PHYSICIANS for position with young expanding group. Liberal salary package. Send CV to I. Bloomfield, M.D., Medical Director, P.O. Box 160132 Snapper Creek Station, Miami, Florida 33116 or call (305) 596-2896.

STAFF PSYCHIATRIST — Community Mental Health Clinic, Key West, Florida. No administrative duties; evaluations, medication and therapy. 30 hour week. Beautiful location. Good salary and fringe. Write Dr. Nancy Spisso, Executive Director, Community Mental Health Clinic of the Lower Keys, P.O. Box 488, Key West, Florida 33040.

ORTHOPEDIST — Excellent opportunity for the right man in twenty physician multispecialty group in beautiful Northwest Florida beach community. Immediate incentive compensation plan with guarantee leading to full partnership. No investment required. Ideal practice setting in new building located directly across the street from new modern hospital. Contact: Theodore D. Rahe, Administrator, White-Wilson Medical Center, Fort Walton Beach, Florida 32548. (904) 863-4121.

EMERGENCY DEPARTMENT PHYSICIAN NEEDED to join established group. Short work week, malpractice paid, retirement plan in second year with Blue Cross/Blue Shield and life insurance. For further information contact: R. W. Carr, M.D., Route 3, Box 330, Ocala, Florida 32671.

GROUP OF SIX INTERNISTS — SOUTH EAST COAST OF FLORIDA — Has opening for an Allergist or Dermatologist. Type of association to be determined by qualifications. Reply to P.O. Box 147, Lake Worth, Florida 33460.

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EMERGENCY DEPARTMENT CONSULTATION. If you are having difficulties with staffing, physical plant or any other Emergency Department problem, we can help. Medical Emergency Service Associates (MESA), S.C. is a 14-year-old service corporation with a proven record of providing quality Emergency Department coverage. We offer consulting, design and evaluative services which could help you identify and correct your problem. If you are interested, contact Mr. C. Huffman in care of: MESA, 188 Industrial Drive, Suite 316, Elmhurst, Illinois 60126. Phone: (312) 832-4504.

HEALTH SERVICE PHYSICIAN — primary care of in and outpatients (students, their dependents and also employees and their dependents). Rotate nights, weekends and holidays "on-call" with other physicians. Licensed to practice medicine in Florida. Application deadline July 15, 1979. Appointment will begin

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DIRECTOR, MEDICAL SERVICES. Large, Jacksonville insurance company seeks full-time career Medical Director. Responsibilities include consultant services to Underwriting and Claim divisions; counseling services to office staff; providing moderate employee health services. Florida license required; insurance or other industrial background helpful. Excellent salary and benefit package. Send complete work history and qualifications to C-939, P.O. Box 2411, Jacksonville, Florida 32203. Applications kept in strict confidence. An Equal Opportunity Employer, M/F.

CYTOPATHOLOGIST AND CYTOLOGIST, Boston trained offering prompt, complete Pap diagnosis; 24 hour turn-around, mail-order service. Contact: H. J. C. MacMillan, M.D., Doctor's Clinical Lab of Gainesville. Call (904) 373-3395.

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FAMILY PRACTITIONER, 31, board eligible, seeks group, associate, partnership or solo in southern Florida. Available February 1st. Florida license applied for. Please reply: 19781 Futura Drive, Yorba Linda, California 92686.

DIAGNOSTIC RADIOLOGIST — 39 years old, just completed residency, former private practitioner of Internal Medicine, seeks position on or near Florida west coast. Reply: Bert L. Booker, M.D., 24—41st Avenue, Isle of Palms, South Carolina 29451.

INTERNIST-CARDIOLOGIST, 36, FMG, fully US trained. Board eligible. Expertise: ECHO, Stress Testing and all aspects of Clinical Cardiology and Internal Medicine. Knowledge of Spanish. Write C-931, P.O. Box 2411, Jacksonville, Florida 32203 or call (817) 772-9755.

NEUROLOGIST, 35, board- eligible, seeks partnership, group or hospital-based practice in any part of Florida. Experienced in EEG, EMG, and CT. Randolph S. Geslani, M.D., 1300 East & West Road, West Seneca, New York 13224.

PEDIATRICIAN, foreign graduate, U.S. trained, with Florida license; seeking solo, group, clinic or hospital based practice. Reply to C-936, P.O. Box 2411, Jacksonville, Florida 32203.

PEDIATRICIAN, 35, board eligible, Florida licensed, wants opportunity on or near Florida coast. Jill U. Gallien, M.D., P.O. Box 1733, Natchez, Miss. 39120, (601) 442-5332.

PEDIATRICS — Board certified FAAP with private practice experience, excellent credentials, desire private practice opportunity, preferably group setting anywhere in Florida. Licensed in Florida. Available immediately. Write C-938, P.O. Box 2411, Jacksonville, Florida 32203.

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PATHOLOGIST, LOCUM TENENS WANTED: July and August. board certified; university trained in N.E. with 15 years experience. Expertise in hematology and cytology. Call (904) 373-3395.

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INTERNIST PRACTICE FOR SALE in Jacksonville. Equipment, office lease and patients charts. For further information write C-929, P.O. Box 2411, Jacksonville 32203.

CENTRAL FLORIDA FAMILY PRACTICE. Condo office in a medical-dental complex for sale by owner. 1,200 square feet — 4 examining rooms, etc. 95% collection rate. Good area. For details call (305) 647-6454 or (305) 830-0570 after five.

FAMILY PRACTICE AVAILABLE, beautiful South Gulf Coast area; unspoiled beaches, excellent fishing. Low rental, attractive well equipped office, all new equipment, established clientele, excellent collection rate. High growth area, needs a replacement for physician returning to training. Available July, August or September; will introduce if time permits. Extremely reasonable. Reply to C-934, P.O. Box 2411, Jacksonville, Florida 32203.

INTERNIST PRACTICE FOR SALE in Central Florida. Equipment, office lease and patient charts. Write C-937, P.O. Box 2411, Jacksonville, Florida 32203.

ACTIVE CARDIOLOGY PRACTICE FOR SALE including office adjacent to hospital. Tampa Bay area. Contact Mr. Leveritt (813) 821-0648.

PRACTICE FOR SALE: Miami, Florida — Southwest. Retiring for health. Family practice for sale. Office fully equipped. Excellent gross. Take over lease. Close to three hospitals. Will introduce patients. Write C-940, P.O. Box 2411, Jacksonville, Florida 32203.

### Equipment

TWO BLOOD GAS ANALYZERS FOR SALE. The Parkland Medical Center has two blood gas analyzers for sale that are manufactured by Radiometer. They include the following: BMS 3MK 2 - Blood Microsystems; PMB 72 MK 2 - Analyzer. These machines are in absolute perfect working order and will be shipped to the buyer anywhere in the U.S. The Parkland Medical Center originally purchased these two machines in error. We are willing to negotiate the sale of one or both machines at a very reasonable price. For further information please contact Mr. Jack Booker, Director of Laboratories, Mr. Jim Dobbins, Administrator, or Mr. Paul Switzer, Chairman of the Board. Call collect at (305) 628-0677.

### Real Estate

OUTSTANDING LOCATION FOR SPECIALIST: St. Nicholas Medical Center. Central location, off street parking and all utilities furnished (including janitor service). Contact W. G. Allen, Jr., Owner-Manager, St. Nicholas Medical Center, 3127 Atlantic Boulevard, Jacksonville 32207. Phone: (904) 398-5500.

LAKELAND, FLORIDA: FOR SALE, 6% down. Air-conditioned office for one to three physicians. Main street, 168 x 140 ft.; double parking lots; extra cottage. Dr. L. Polskin, Box 15966, Honolulu, Hawaii 96815.

FLORIDA — (SOUTHEAST) — DELRAY: Offices for lease in single story medical plaza adjacent to Interstate-95; busy intersection and newly built convalescent center; tremendous opportunity to grow with a rapidly growing middle class community of single-family and condominium dwellings. Contact: Lawrence M. Landis, 900 S. Congress Ave., Delray, Florida 33445. Phone: (305) 278-0062.

JACKSONVILLE. 1,500 square feet, medically designed office available in newly refurbished Shops of Sherwood (northwest area of Jacksonville). A/C, ample parking. Located in stable, middle income residential community which needs medical doctor. Ideal for growing practice. Some equipment available. Start at $250 per month. Call collect (305) 446-4284.

TOP SOUTH FLORIDA LOCATION FOR SPECIALISTS: Coral Springs, which is one of the fastest growing communities in Florida, needs specialists. Coral Springs Medical Center has office space available in established medical complex. Excellent conditions. Lease or buy in. Contact Bruce McCully, 9441 West Sample Road, Coral Springs, Florida 33065. Phone: (305) 752-1600.

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FOR SALE: 7,600 sq. ft. Professional/Commercial building now under construction with occupancy July 1979. Excellent location. Ample parking. Suitable for attorney, doctor, dentist, other medical professionals, insurance, satellite offices. Call (813) 472-1439 or write Palm Ridge Associates, Inc., P.O. Box 194, Sanibel, Florida 33957.

NEW PROFESSIONAL 1,000 SQ. FT. OFFICE SUITE, fully equipped, available for rent. In rapidly growing Orlando—Altamonte Springs area. Centrally located. Within half mile of new General Hospital within two miles of two major shopping malls. For details call: (after 6:00 p.m.) (305) 831-3185 or write: Mr. Leonard Strickland, 1561 Avalon Boulevard, Casselberry, Florida 32707.

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FOR YOU AND YOUR FRIENDS: Property close to winter skiing facility; gentle mountain slopes and trails for hiking, motor bikes, horseback travel, etc. Spring-fed streams. Unspoiled forest and mountain ridges. Interior road system. 275 acres near Wilkesboro, N.C. $137,500 cash or very easy financing. Call Wiegand Real Estate, Inc., P.O. Box 423, Conway, S.C., 29526. Phone: (803) 365-5545.

MODERN PROFESSIONAL SPACE FOR RENT. Full service outpatient private medical, dental clinic in growing sunny Orlando, Florida, has space to rent or share for physicians. Full x-ray and laboratory on premises. Close to most hospitals. Contact Mr. Jim Dobbins or Mr. Paul Switzer at (305) 628-0677.

PHYSICIAN PRACTICE WHERE YOU ARE NEEDED. Exclusive office suites in the heart of growing Pompano Beach are now available. Equipped with all essentials. Negotiable leases. Ample private parking. Call owner (305) 772-7173.

BREVARD COUNTY (Cape Kennedy Area). Several outstanding office suites for lease and/or sale in Cocoa, Cocoa Beach, Titusville, and Melbourne. Can be tailored to individual or clinical needs. Contact: Trend Realty, Inc. Realtors, P.O. Box 39, Cocoa Beach, Florida 32931. Attention: Dudley Hain, Realtor-Associate, (305) 783-8686.

FOR SALE: MEDICAL BUILDING — OCALA, FLORIDA. 8,200 sq. ft. Built 1974, unique architecture, Lead x-ray room, two blocks from hospitals. 2,200 sq. ft. currently leased. MUST SELL QUICK!! Priced at $560,000 with 29% down or make offer!! Contact Joyce Moody, salesman Res. (904) 629-3747. John J. Piccone Real Estate, Inc., 2941 N.E. 3rd St., Ocala, Florida 32670.

OFFICE SPACE: 2,500 square feet vacant in downtown Delray Beach Medical Building, 21,000 square feet total size, occupied by four Internist-Cardiologists, two Surgeons, two Orthopedists, one Radiologist and one Ophthalmologist. Interested physicians call (305) 278-3323 and ask for Peggy Hanshumaker or Drs. Wachtel, Pace or Bebout.

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# For recurrent attacks of urinary tract infection in women

# Bactrim™ DS Double Strength Tablets

Each tablet contains 160 mg trimethoprim and 800 mg sulfamethoxazole.

## Just one tablet b.i.d. for 10 to 14 days

- Action at urinary/vaginal/lower bowel sites helps eliminate reservoirs of infecting organisms
- Distinctive antibacterial action plus wide spectrum helps eradicate recurrent UTI
- Low incidence of bacterial resistance in community practice
- Convenient *b.i.d.* dosage provides day-and-night antibacterial control
- Contraindicated during pregnancy and the nursing period. During therapy, maintain adequate fluid intake; perform CBC's and urinalyses with microscopic examination.

**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms:** *Escherichia coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris, Proteus morganii.* **It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination.** *Note:* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

**Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.**

The recommended quantitative disc susceptibility method (*Federal Register*, 37:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

**Contraindications:** Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers; infants less than two months of age.

**Warnings:** Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

**Precautions:** Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

**Adverse Reactions:** All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

**Dosage: Not recommended for infants less than two months of age.**

*Urinary Tract Infections:* Usual adult dosage—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

Recommended dosage for children—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. A guide follows:

*Children two months of age or older*

| Weight | | Dose—every 12 hours | |
|---|---|---|---|
| lbs | kgs | Teaspoonfuls | Tablets |
| 20 | 9 | 1 teasp. (5 ml) | ½ tablet |
| 40 | 18 | 2 teasp. (10 ml) | 1 tablet |
| 60 | 27 | 3 teasp. (15 ml) | 1½ tablets |
| 80 | 36 | 4 teasp. (20 ml) | 2 tablets or 1 DS tablet |

For patients with renal impairment:

| Creatinine Clearance (ml/min) | Recommended Dosage Regimen |
|---|---|
| Above 30 | Usual standard regimen |
| 15-30 | ½ the usual regimen |
| Below 15 | Use not recommended |

*Pneumocystis carinii pneumonitis:* Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

**Supplied:** *Double Strength (DS) tablets*, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. *Tablets*, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10. *Oral suspension*, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole, fruit-licorice flavored—bottles of 16 oz (1 pint).

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# the Bactrim™ 3-system counterattack

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Bactrim has shown high clinical effectiveness in recurrent cystitis as a result of its wide spectrum and distinctive antimicrobial action in the urinary, vaginal and lower intestinal tracts.

The probability of recurrent urinary tract infection appears to be enhanced by the establishment of large numbers of *E. coli* or other urinary pathogens on the vaginal introitus. The trimethoprim component of Bactrim diffuses into vaginal fluid in effective concentrations, thus combating migration of pathogens into the urethra.

Studies have shown that Bactrim acts against *Entero bacteriaceae* in the bowel without the emergence of res tant organisms. Thus, Bactrim reduces the risk of introi colonization by fecal uropathogens. It has *no* significant effect on other normal, necessary intestinal flora.

## Bactrim fights uropathogens in the urinary tra ntestinal tract

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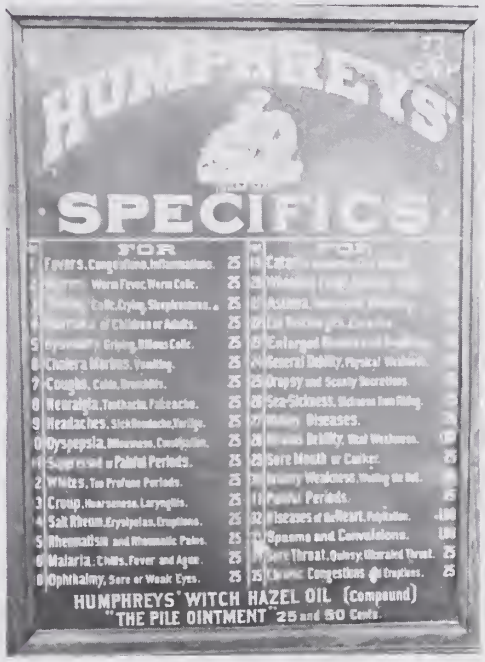


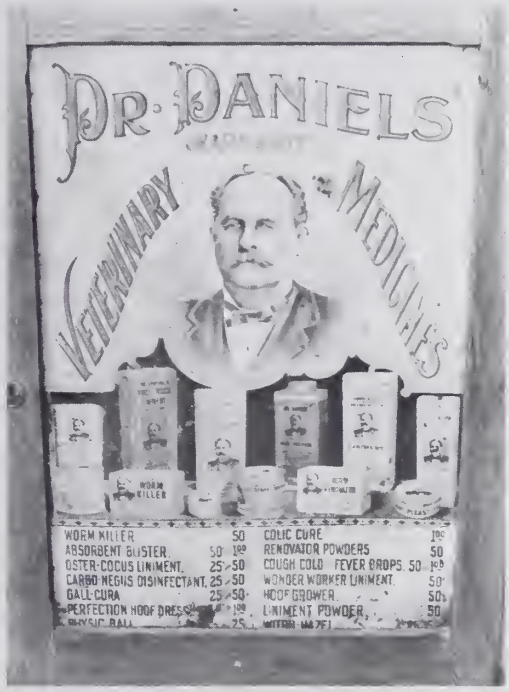

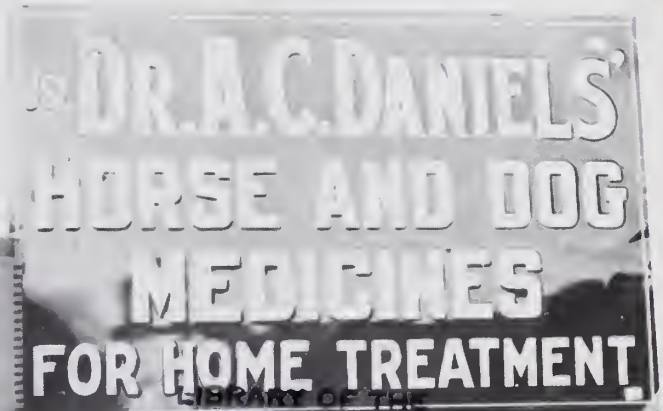


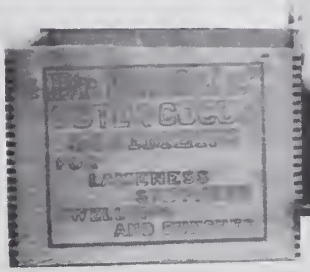

# Historical Issue

William M. Straight, M.D.
Guest Editor

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SEP 18 1979

# A character all its own.

Valium (diazepam/Roche) is a benzodiazepine with a character all its own. Pharmacologically, it is a potent skeletal muscle relaxant and anticonvulsant (in adjunctive use), as well as an antianxiety agent. Pharmacokinetically, only Valium provides active *diazepam* as well as the active metabolites 3-hydroxydiazepam, desmethyldiazepam and oxazepam.

But the individual character of Valium is even more apparent clinically than pharmacokinetically. And far more significant. That's because of the patient response obtained with Valium. A response which brings a calmer frame of mind. A response which has a pronounced effect on the somatic symptoms of anxiety, particularly muscular tension. A response which helps the patient feel more like himself again because of the way Valium reduces the overwhelming symptoms of anxiety and psychic tension.

Another important aspect of the clinical character of Valium is safety. Though drowsiness, ataxia and fatigue are possible, these and more serious side effects are rarely a problem. Of course, as with all CNS-acting drugs, patients taking Valium should be cautioned against driving, operating dangerous machinery or the simultaneous ingestion of alcohol.

Unquestionably, many psychotherapeutic agents, including other benzodiazepines, have antianxiety effects. But one fact remains: you get a certain kind of patient response with Valium. It's a response you want. A response you know. A response you trust as part of your overall management of anxiety and psychic tension.

# Valium® IV
## diazepam/Roche

2-mg, 5-mg, 10-mg scored tablets

**a prudent choice in psychic tension and anxiety**

**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications:** Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).
The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

**Contraindicated:** Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

**Warnings:** Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

**Precautions:** If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

**Side Effects:** Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

**Dosage:** Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

**Supplied:** Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10.

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Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

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We're already starting on new banking programs that will help our state develop and grow. We're putting special emphasis on markets that are the heart of Florida.

We're particularly committed to the growth of Florida business, because we believe that means more jobs, and better lives for us all. We are also committed to making Florida an international trade center.

We're consolidating banks wherever we legally can, to make your banking easier and more convenient.

We're evaluating and selecting the electronic banking services that make the most sense for all of us.

We're also offering more and more savings plans and financial management programs to help you meet your own personal goals.

We don't want you to arrive at the end of the next ten years without much to show for it. So we're working right now to get you ready for 1989.

AM Wolfe Jr

Alexander McW. Wolfe, Jr.
President—Banking Group
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AUGUST COVER — The cover is a collage of photographs taken from Dr. Mark V. Barrow's article in this issue entitled "S Treatment Practices in North Florida."

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# President's Page

## The Right to Practice Our Art

Energy and America's economic woes have become the foremost news items of the day. When the big political issues get down to the nitty gritty of everyone's standard of living or, for some, survival, abstract political philosophy is forced out of view.

Depression, recession, scarcity and runaway inflation create the public outcry for the quick fix. Those of us who have strong ideas about how the order of things should be may find ourselves running against a tide of public opinion which seeks earthly salvation in a time of trouble.

It takes some fancy footwork to keep long term political idealism alive while trying to live with the bandaid pragmatists. We in medicine generally cling to the concept that freedom means more than a set of elastic constitutional guarantees. We hold dear the right to practice our art and pursue scientific truth unfettered by regulatory constraint. The quick fixer will lose sight of that simple thought in order to snatch the service commodity of medical care from the hand that provides and place it in the hand that perceives need.

Unlike the expropriated factory, mine or farm, the service industry subjected to takeover survives governmental transfer very badly. Nevertheless, in the face of economic pressure the quick fixer can, because services as a property right are harder to define, apply his governmental transfer philosophy to service quicker than to other property.

The expropriation of medical care to be delivered to the consumer will be a tempting means of economic shuffling for at least one part of the economy when the market basket begins to empty. The obvious rapid decline in the quality of the product that must take place will not be felt by the public at first.

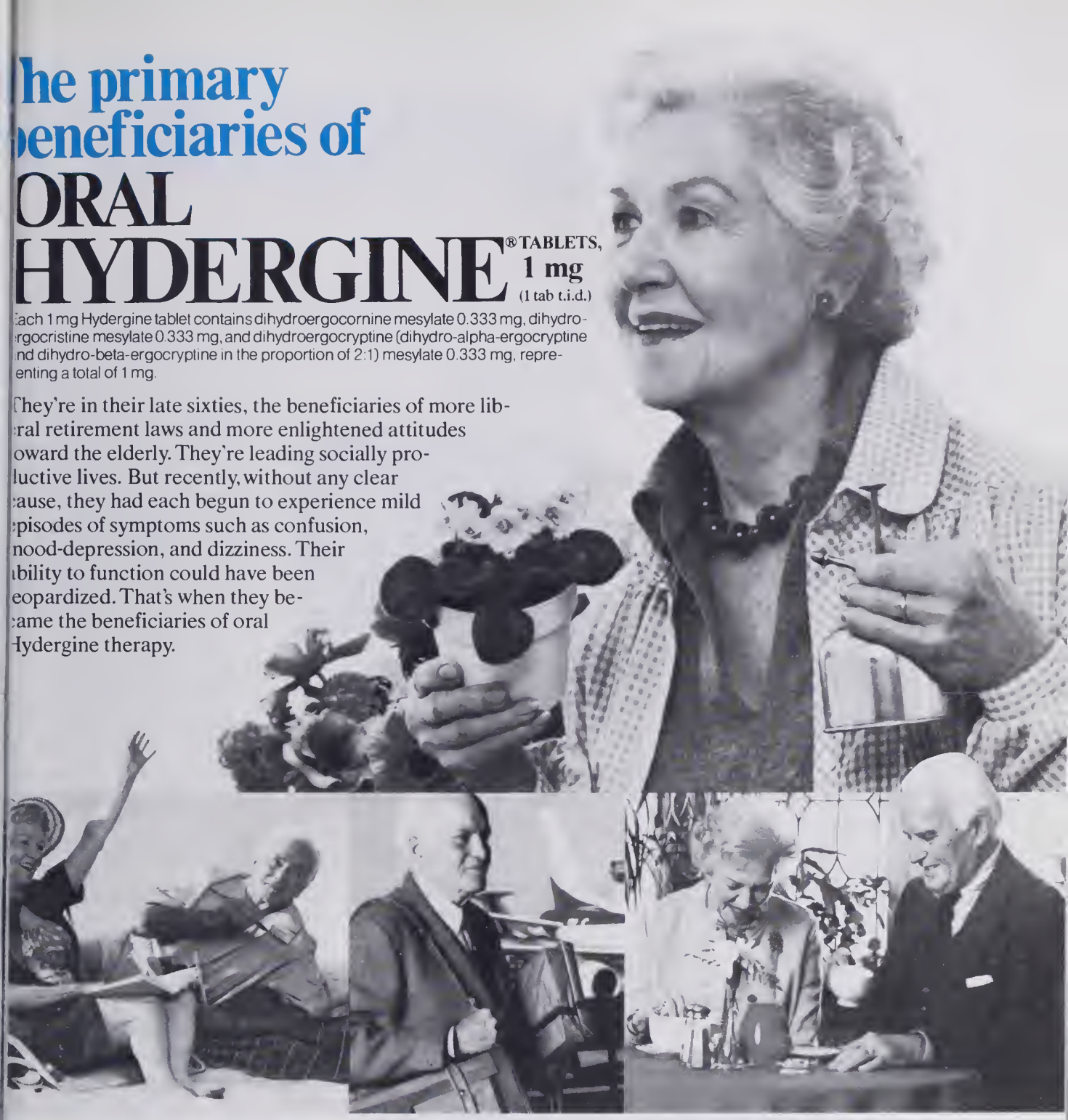
By the time the people perceive their loss the economy will have recovered. It will then be up to those who have not lost their vision of what a quality health care system should be to re-establish those principles of medicine which many may have let slip away.

Richard Hodes

# he primary
# eneficiaries of
# ORAL
# HYDERGINE® TABLETS, 1 mg
(1 tab t.i.d.)

ach 1 mg Hydergine tablet contains dihydroergocornine mesylate 0.333 mg, dihydro-rgocristine mesylate 0.333 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine nd dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.333 mg, repre-enting a total of 1 mg.

hey're in their late sixties, the beneficiaries of more lib-ral retirement laws and more enlightened attitudes oward the elderly. They're leading socially pro-luctive lives. But recently, without any clear ause, they had each begun to experience mild pisodes of symptoms such as confusion, nood-depression, and dizziness. Their bility to function could have been eopardized. That's when they be-ame the beneficiaries of oral Hydergine therapy.



## e still-functioning geriatric can benefit om Hydergine treatment

is quite common for cognitive and emotional symp-ms of deterioration to manifest gradually in the elderly. uring this early stage, such symptoms are mild and ore amenable to treatment. It is at this stage that ydergine therapy has proved most effective. Patients nd to respond better, and with symptoms effectively lieved—or at least their progression retarded—the ility to function can be maintained.

## ral Hydergine tablets promote etter patient compliance

ompared with the sublingual form, dosage administra-on is easier, with less need for supervision.

**Contraindications:** Hypersensitivity to the drug.
**Precautions:** *Because the target symptoms are of unknown etiology, careful diagnosis should be attempted before prescribing Hydergine tablets and sublingual tablets.*
**Adverse Reactions:** Serious side effects have not been found. Some sublingual irritation, transient nausea, and gastric disturbances have been reported. Hydergine tablets and sublingual tablets do not possess the vasoconstrictor properties of natural ergot alkaloids.
**Dosage and Administration:** 1 mg three times daily. Alleviation of symptoms is usually gradual and results may not be observed for 3–4 weeks.
**How Supplied: Hydergine tablets (for oral use) 1 mg,** packages of 100 and 500. **Hydergine sublingual tablets 1 mg,** containing dihydroergocornine mesylate 0.333 mg, dihydroergocristine mesylate 0.333 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.333 mg, representing a total of 1 mg; packages of 100, 500, and 1000. **Hydergine sublingual tablets 0.5 mg,** containing dihydroergocornine mesylate 0.167 mg, dihydroergocristine mesylate 0.167 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.167 mg, representing a total of 0.5 mg; packages of 100 and 1000.
*Before prescribing, see package insert for full product information.*

SANDOZ PHARMACEUTICALS, EAST HANOVER, N.J. 07936

SANDOZ
SDZ 9-350

1979 Sandoz, Inc.

# The Maker

## Examining a Few Myths About Prescribing.

Increasing pressure is being put on the practicing physician to prescribe drugs generically. You are told that brand-name products are universally "expensive" and generic versions are relatively "cheap." To make this case, the most extreme (rather than typical) price differentials are cited. Thus, consumers are led to believe that such differentials are commonplace. Even your knowledge and your motives as a physician are questioned.

Understandably, these views have created myths. We think it's time to examine them in the light of all the facts and ramifications.

*MYTH: There are no differences in quality and performance between brand-name products and their generic counterparts. The corollary is that there are no differences among products made by high-technology, quality-conscious, research-based companies and those made by commodity-type suppliers.*

**FACT: The Food and Drug Administration does a good job in monitoring a generally excellent drug supply. Still, it has nowhere near the resources to guarantee the quality and bioavailability of all marketed products at any given time. Just a few months ago, for example, it noted that batches of tetracycline HCl capsules which met official monograph requirements were not bioequivalent to a reference product. As y know, there is substanti literature on this subjec affecting many drugs, i cluding such antibiotic as tetracycline and erythromycin. The record drug recalls and court actions affirms strongl that there are differenc among pharmaceutical companies and their products. Research-intensive companies have far better records than those that do no re search and may practic minimum quality assu ance.**

---

*MYTH: Industry favors only "expensive" brand names and denigrates all generics.*

**FACT: PMA companies make 90 to 95 percent the drug supply, includ ing, therefore, most of generics. Drug nomenclature is not the impo tant point; it's the com tence of the manufacturer and the integrity the product that count.**

# Matters.

*MYTH: Generic options almost always exist.*

**FACT: About 55 percent of prescription drug expenditure is for single-source drugs. This means, of course, that for only 45 percent of such expenditure, is a generic prescribing option available.**

---

*MYTH: Generic prescriptions are filled with inexpensive generics, thus saving consumers large sums of money.*

**FACT: Market data show that you invariably prescribe—and pharmacists dispense—both brand and generically labeled products from known and trusted sources, in the best interest of patients. In most cases the patient receives a proven brand product. Savings from voluntary or mandated generic prescribing are grossly exaggerated.**

*MYTH: Drugs account for a major portion of the rise in health care costs.*

**FACT: Drugs represent a very small part of such costs. The amount of the health care dollar spent for prescription drugs was about 12 cents in 1967; today it is about 8 cents. And you as a physician are most conscious of how drug therapy can cut hospitalization, avert surgery, reduce office visits and keep patients on the job.**

---

*MYTH: Government intrusions into the marketplace will save tax money.*

**FACT: Government schemes always cost the taxpayer something, and the costs often exceed the benefits. Certainly, any federal "help," such as lists of wholesale drug prices sent to all physicians and pharmacists, will be no exception. Just think of the expense of keeping them current! Moreover, wholesale prices are poor guides to actual transaction prices and even worse guides to retail prices.**

## The PMA Position

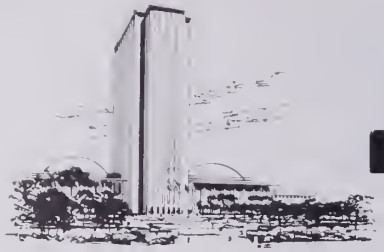
We believe your freedom to prescribe, either by generic or brand name, should be totally unabridged. Otherwise, your prescribing prerogatives and your relationships with patients will be seriously impaired.

## The maker does matter

After the myths about price and equivalency have been shattered, one fact stands out more clearly than ever: *The maker does matter.* As always, your best guide to drug therapy for your patients is to select products—both brands and generics—from manufacturers with credentials and performance records you have come to respect.

PMA

Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D.C. 20005



# LEGISLATIVE NEWS

The 1979 Florida Legislature enacted many bills of interest to Florida physicians. The following summary of some of these new laws was prepared by the FMA Capital Office:

### CS/SB 727 (Ch. 79-36)

This law reorganizes the Department of Professional and Occupational Regulation and renames the department, as the Department of Professional Regulation. The major thrust of the reorganization is to centralize certain administrative functions of all professional boards (i.e. trust funds, license issuance, preparation and administration of examinations, etc.) and to provide a check on the boards in the area of discipline by giving certain responsibilities to the department (i.e. investigations, legal services, etc.). The following is a summary of the major provisions of the law:

*Lay Members:* Boards with 5 or more members shall have at least 2 lay members.

*Executive Director:* Appointed by the Department subject to approval of the board.

*Rules:* The secretary of the department shall have standing to challenge board rules under certain conditions.

*Examinations:* The department will prepare and administer exams pursuant to rules of the board regarding general areas of competency. The department is mandated to utilize national exams, if approved by the board. The department may delegate exam duties to the boards.

*Legal Services to Boards:* To be provided by the Department of Legal Affairs or the department may utilize outside counsel.

*Licensing:* Licenses to be issued by the department upon certification by the board that requirements have been met.

*Fees:* Board to determine license fees by rule subject to statutory limitations.

*Terms of Board Members:* Limited to two four-year terms.

*Discipline:* Department receives and investigates complaints, but may delegate the investigatory function to the board. By rule, the board shall determine whether a panel of the board or the department will be responsible for finding probable cause. If a panel of the board finds no probable cause the department may determine within 10 days that probable cause does exist.

The board shall determine and issue the final order. The department shall have standing to seek judicial review of any final order of the board.

### CS/SB 1146 Medicaid

This law creates the position of Deputy Assistant Secretary for Medicaid within the Department of Health and Rehabilitative Services. The responsibilities of this position encompass *all* medicaid planning and development functions, including policy and program development, program monitoring, provider relations, interprogram planning, program surveillance and utilization review. Additionally, a Medicaid Advisory Council is mandated in accordance with Federal Regulations.

The creation of this position will substantially elevate the Medicaid program within DHRS.

### CS/SB 367 (79-105) Hospital Privileges

This law creates a new section within the hospital licensing statute (chapter 395, Florida Statutes) which prohibits hospitals from denying privileges *solely* because the applicant is an osteopath, podiatrist, dentist or doctor of medicine. However, the hospital's medical staff retains authority to review applications for privileges and reappointment, as well as, delineation of privileges to be granted based upon criteria applied equally to all disciplines on an individual basis.

Hospitals are required to develop standards and procedures by January 1, 1980, to implement these requirements which shall be made available for public inspection.

*(To be continued next month)*

# Conduct with Pronestyl® Tablets

## Procainamide Hydrochloride Tablets

**The only procainamide in veneer-coated, easy-to-swallow tablets**

**250 mg** **375 mg** **500 mg**

- available in 3 tablet strengths for easier dosage adjustment—up or down— in all patients
- produced under exacting quality control standards by Squibb— numerous critical control tests from starting material to finished product
- offered only under the Squibb label—your assurance of reliable, quality therapy for life-threatening arrhythmias.

See following page for brief summary

# PRONESTYL® TABLETS
## Procainamide Hydrochloride Tablets

The prolonged administration of procainamide often leads to the development of a positive anti-nuclear antibody (ANA) test with or without symptoms of lupus erythematosus-like syndrome. If a positive ANA titer develops, the benefit/risk ratio related to continued procainamide therapy should be assessed. This may necessitate considerations of alternative anti-arrhythmic therapy.

**DESCRIPTION:** Pronestyl (Procainamide Hydrochloride) is the amide analogue of procaine hydrochloride and is available for oral administration as veneer-coated tablets providing 250 mg, 375 mg, and 500 mg procainamide hydrochloride.

**CONTRAINDICATIONS:** In patients with myasthenia gravis and where a hypersensitivity to procainamide exists; bear in mind cross sensitivity to procaine and related drugs. Should not be given to patients with complete atrioventricular heart block. Contraindicated in cases of second degree and third degree A-V block unless an electrical pacemaker is operative.

**PRECAUTIONS:** Evidence of untoward myocardial responses should be carefully watched for in all patients. In the presence of myocardial damage with atrial fibrillation or flutter, the ventricular rate may increase suddenly as the atrial rate is slowed; adequate digitalization reduces but does not abolish this danger. Ventricular tachysystole is particularly hazardous if myocardial damage exists.

The dislodgment of mural thrombi producing an embolic episode may occur in correcting atrial fibrillation due to the forceful contractions of the atrium.

Extreme caution is required in attempting to adjust the heart rate when ventricular tachycardia has occurred during an occlusive coronary episode or where the use of procainamide may result in additional depression of conduction and ventricular asystole or fibrillation as in second degree and third degree A-V block, bundle branch block, or severe digitalis intoxication.

Bear in mind when treating ventricular arrhythmias in patients with severe organic heart disease and ventricular tachycardia that complete heart block, which may be difficult to diagnose, may be present. Since asystole may result if the ventricular rate is significantly slowed without attainment of regular atrioventricular conduction, procainamide should be stopped and the patient re-evaluated.

In the presence of both liver and kidney damage, normal dosage may produce symptoms of overdosage—principally ventricular tachycardia and severe hypotension.

A syndrome resembling lupus erythematosus has been reported with oral maintenance procainamide therapy. Common symptoms are polyarthralgia, arthritis and pleuritic pain. Fever, myalgia, skin lesions, pleural effusion and pericarditis may also occur. Rare cases of thrombocytopenia or Coombs-positive hemolytic anemia, possibly related to this syndrome, have been reported. Measure anti-nuclear antibody titers at regular intervals in patients on procainamide for extended periods of time or in whom symptoms suggestive of lupus-like reaction appear; in event of rising titer (anti-nuclear antibody) or clinical symptoms of LE, assess the benefit/risk ratio related to continued procainamide therapy (see boxed Warning). Steroid therapy may be effective if discontinuation of procainamide does not cause remission of symptoms. If the syndrome develops in a patient with recurrent life-threatening arrhythmias not otherwise controllable, steroid-suppressive therapy may be used concomitantly with procainamide.

**ADVERSE REACTIONS:** Hypotension is rare with oral administration. Serious disturbances of cardiac rhythm such as ventricular asystole or fibrillation are more common with I.V. administration.

Large oral doses may sometimes produce anorexia, nausea, urticaria, and/or pruritus.

A syndrome resembling lupus erythematosus has been reported in patients on oral maintenance therapy (see Precautions). Reactions consisting of fever and chills have been reported, including a case with nausea, vomiting, abdominal pain, acute hepatomegaly, and a rise in serum glutamic oxaloacetic transaminase following single doses of the drug. Agranulocytosis has been occasionally reported following repeated use of the drug, and deaths have occurred. Therefore, routine blood counts are advisable during maintenance procainamide therapy; and the patient should be instructed to report any soreness of the mouth, throat or gums, unexplained fever or any symptoms of upper respiratory tract infection. If any of these symptoms should occur and leukocyte counts indicate cellular depression, procainamide therapy should be discontinued and appropriate treatment should be instituted immediately. Bitter taste, diarrhea, weakness, mental depression, giddiness, psychosis with hallucinations, and hypersensitivity reactions such as angioneurotic edema and maculopapular rash have been reported.

For full prescribing information, consult package insert.

**HOW SUPPLIED:** Pronestyl Tablets (Procainamide Hydrochloride Tablets) providing 250 mg, 375 mg, and 500 mg procainamide hydrochloride are available in bottles of 100 and Unimatic® single-dose packaging in cartons of 100. The 250 mg and 500 mg tablets are also available in bottles of 1000.

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# When the indications surface...

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Net wt 1/2 oz

Net wt 1/32 oz
(approx)

# NEOSPORIN® Ointment

## (Polymyxin B-Bacitracin-Neomycin)

Burroughs Wellcome Co.
Research Triangle Park
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Each gram contains: Aerosporin® (Polymyxin B Sulfate) 5,000 units, bacitracin zinc 400 units, neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base), special white petrolatum qs; in tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

**INDICATIONS:** *Therapeutically,* (as an adjunct to systemic therapy when indicated), for topical infections, primary or secondary, due to susceptible organisms, as in: infected burns, skin grafts, surgical incisions, otitis externa; primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia); secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis); traumatic lesions, inflamed or suppurating as a result of bacterial infection. *Prophylactically,* the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

**CONTRAINDICATIONS:** This product is contraindicated in those individuals who have shown hypersensitivity to any of its components. Do not use in the eyes or in the external ear canal if the eardrum is perforated.

**WARNING:** Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.

**PRECAUTIONS:** As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

**ADVERSE REACTIONS:** Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.

# Pinworm: simply awful

© Ortho Pharmaceutical Corporation 1979

# Vermox: awfully simple

## No dosage calculation

**one dose** single VERMOX 100 mg tablet is the treatment for pinworm in both adults and children* of all body weights; no dosage calculations or confusion

**one time** the VERMOX tablet may be taken any time that is convenient, so that normal routines won't be interrupted; convenient schedule encourages compliance

**one tablet** chewable, orange-flavored VERMOX tablet may also be crushed and mixed or simply swallowed; no messy liquid to spill and no dye to stain

**95% cure** mean cure rate in clinical studies was 95% (range: 90%-100%) after treatment with one VERMOX tablet; in cases of reinfection, a second tablet is advised

* Because Vermox has not been extensively studied in children under two years of age, the relative benefit/risk should be considered before treating these children. Vermox is contraindicated in pregnancy (see: Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

# Vermox chewable tablets
TRADEMARK
# (mebendazole)

**cription** VERMOX (mebendazole) is methyl nzoylbenzimidazole-2-carbamate.

**ons** VERMOX exerts its anthelmintic effect by king glucose uptake by the susceptible helminths, eby depleting the energy level until it becomes equate for survival.

an, approximately 2% of administered meben- le is excreted in urine as unchanged drug or a ary metabolite. Following administration of 100 mg ebendazole twice daily for three consecutive days, ma levels of mebendazole and its primary abolite, the 2-amine, never exceeded 0.03 $\mu$ g/ml 0.09 $\mu$ g/ml, respectively.

**ications** VERMOX is indicated for the treatment of *buris trichiura* (whipworm), *Enterobius vermicularis* worm), *Ascaris lumbricoides* (roundworm), *Ancylos- a duodenale* (common hookworm), *Necator ameri- us* (American hookworm) in single or mixed infections. acy varies in function of such factors as pre-existing diarrhea and gastrointestinal transit time, degree of infection and helminth strains.

**Contraindications** VERMOX is contraindicated in pregnant women (see: Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

**Precautions** *PREGNANCY:* VERMOX has shown embryotoxic and teratogenic activity in pregnant rats at single oral doses as low as 10 mg/kg. Since VERMOX may have a risk of producing fetal damage if administered during pregnancy, it is contraindicated in pregnant women.

*PEDIATRIC USE:* The drug has not been extensively studied in children under two years; therefore, in the treatment of children under two years the relative benefit/risk should be considered.

**Adverse reactions** Transient symptoms of abdominal pain and diarrhea have occurred in cases of massive infection and expulsion of worms.

**Dosage and administration** The same dosage schedule applies to children and adults. The tablet may be chewed, swallowed or crushed and mixed with food.

For the control of pinworm (enterobiasis), a single tablet is administered orally, one time.

For the control of roundworm (ascariasis), whipworm (trichuriasis), and hookworm infection, one tablet of VERMOX is administered, orally, morning and evening, on three consecutive days.

If the patient is not cured three weeks after treatment, a second course of treatment is advised. No special procedures, such as fasting or purging, are required.

**How supplied** VERMOX is available as chewable tablets, each containing 100 mg of mebendazole, and is supplied in boxes of twelve tablets.

VERMOX (mebendazole) is an original product of Janssen Pharmaceutica, Belgium, and co-developed by Ortho Pharmaceutical Corporation.

HO PHARMACEUTICAL CORPORATION
tan, New Jersey 08869

OJ-1511

ORTHO

# FROM THE EDITOR'S DESK

## FEDERAL AGENCIES DIFFER

Two government agencies differ on the amount of health care expense that could be saved under the Carter Administration's proposed hospital cost containment bill. The Department of HEW has placed the projected savings at more than $53 billion for the years 1980-84. The Congressional Budget Office said that's not right, the figure would be more like $31.7 billion. The AMA has asked HEW for information on how the higher figure was arrived at.

## ADMINISTRATION PROGRAM CRITICIZED

Two members of the House Commerce Subcommittee on Health have issued a 78-page report that is critical of the Administration's hospital cost containment bill. The report was written by Democrat Phil Gramm of Texas and Republican Dave Stockman of Michigan. The Administration's estimated savings of $53.4 billion, they said, "is either wildly overstated, or it implies that HEW intends to severely cut the service capacity of those hospitals unlucky enough to fall under mandatory controls."

## RATE LAW REPEALED

Sponsors of Colorado's hospital rate setting law have had second thoughts, and the legislation has been repealed. One State Senate leader, a cosponsor of the law, came out for repeal stating, "I am totally convinced that we have added costs to the consumer through this process." The Colorado Hospital Association, which supported enactment two years ago, also changed its mind and joined the repeal effort after encountering nearly $2 million in compliance costs and administrative problems. The rate review board will be abolished next March 1.

## RELATIVE VALUE STUDIES

The California Medical Association has thrown in the towel and will stop publishing and circulating all editions of its relative value studies (RVS). CMA officials said they still believe they are in the right but signed a consent agreement with the Federal Trade Commission rather than take on an expensive court fight that might last for years.

## MULTIPLE CHOICE

The nation's employers would have to offer its workers a choice of three national health insurance plans under legislation introduced in the U.S. Senate. The bill was introduced by Sen. Richard Schweiker (R-Pa.). Employees selecting the less expensive options would get tax-free refunds on the premium differences. The bill also calls for catastrophic coverage by private health insurance and for creation of pools by states to provide coverage for the hard-to-insure.

## REGULATION OF PHYSICIAN SUPPLY

Health planners are meddling with physician supply in at least four states, and the activity may spread to other states. In Hawaii and Rhode Island, the planners are trying to impose certificate-of-need licensure based on predetermined estimates of the number of physicians required. In California and New York, efforts are being made to limit the number of physicians by regulating residency training. The AMA contends that rationing of licenses would reduce the availability of medical services, result in an artificial system that may not answer community needs, and deny the physician applicant equal protection under the law. Regulation of residency programs by specialty would reduce the supply of physicians without reducing the demand for their services, would lower the quality of services, and would retard advances in the practice of medicine.

## MALPRACTICE PREMIUMS

The Department of HEW has imposed a limit on reimbursement of hospitals for malpractice insurance premiums, effective July 1. The new rule is based on the assumption that Medicare patients, particularly the elderly, rarely get huge malpractice awards because of their age and reduced earning potential. HEW expects a possible court challenge.

## DRUG APPROVAL DELAYS

Several witnesses have testified as to the need for speeding up the Food and Drug Administration's drug approval process in hearings conducted by the House Subcommittee on Science Research and Technology. The General Accounting Office has blamed vague guidelines and other factors within FDA for the fact that many useful and important drugs are often in use in foreign countries long before they are approved for the United States. An AMA witness said the AMA has developed a series of amendments to the Food, Drug and Cosmetic Act as a means of reducing the "Drug Lag", has repeatedly called for more funds for the Food and Drug Administration, and will work with the subcommittee to expedite the approval process and improve the climate for drug research.

## WOMEN IN MEDICINE

The AMA will set up an Ad Hoc Committee on the Involvement of Women Physicians in Organized Medicine. Consisting of 10 members, the Committee will explore methods of encouraging participation of women physicians in the AMA, state and county medical societies and specialty groups. The Committee is expected to spend one year in its work.

**The Editor**

# The predictability of an IV infusio

Until Theo-Dur there was only one method for obtaining virtually ideal therapeutic theophylli serum levels—IV infusion.

Theo-Dur provides the therapeutic benefits of I infusion in a tablet:

- a constant rate of theophylline absorption
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- q12h dosage

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# ...in a tablet

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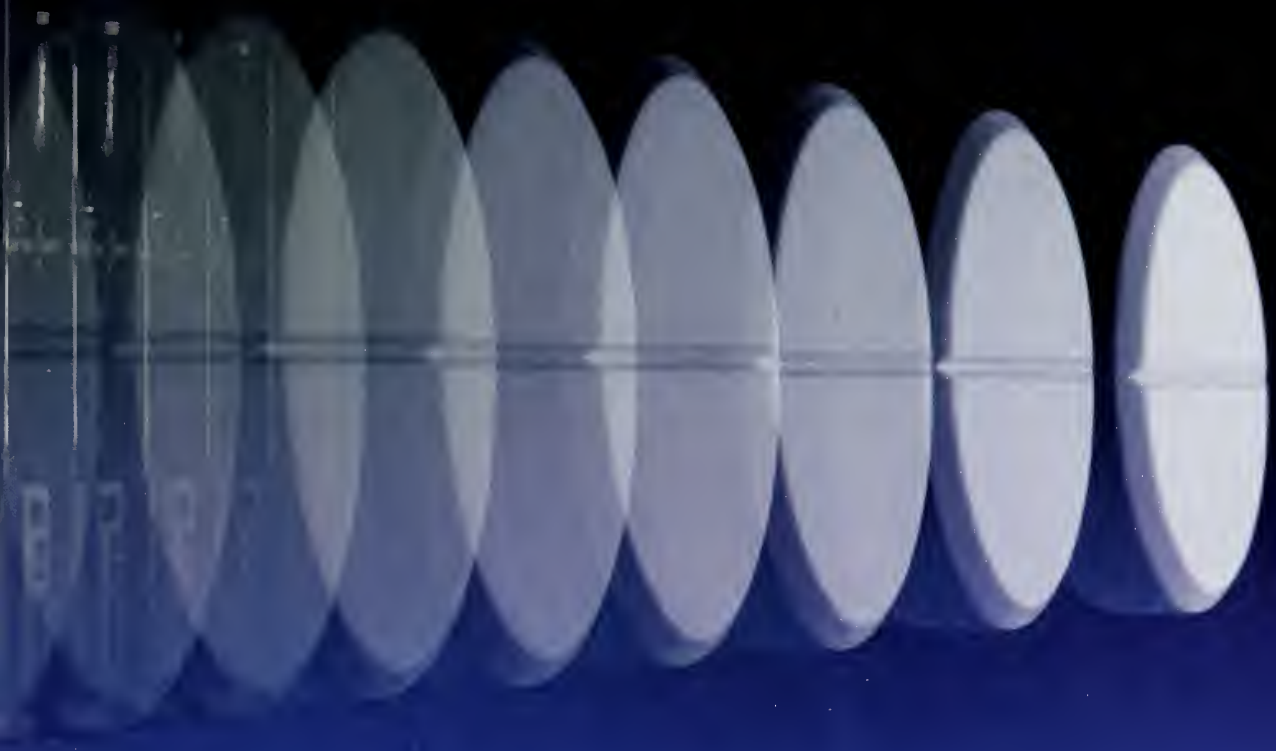
## Zero-Order Anhydrous Theophylline

The only formulation with q12h dosing and zero-order absorption



**ZERO-ORDER dc/dt=K™**
**(constant rate absorption by GI infusion)**

...assures programmed availability of a theophylline dose, hour by hour, for each individual, regardless of clearance rate. Thus, Theo-Dur dosage can be individualized to provide optimal results for each patient.

**Theo-Dur "locks in" on the therapeutic window.** Theophylline serum concentrations between 10 and 20 mcg/ml provide the *therapeutic window* within which Theo-Dur consistently provides optimal therapeutic effect for a full 12-hour interval. Blood levels above 20 mcg/ml may cause toxicity...blood levels below 10 mcg/ml may be ineffective.

**Three strengths for flexible dosage.** Dosage can be easily titrated for maximum therapeutic effect. Scored tablets in 100 mg, 200 mg and 300 mg strengths permit accurate dosage adjustment in as little as 50 mg increments. Patients presently on theophylline can be easily converted to Theo-Dur by dividing the daily anhydrous theophylline intake into two equal doses administered at 12-hour intervals.

**Dosage and Administration:** Average initial dose is 100 mg to 300 mg q12h depending on the age and weight of the patient and the severity of the disease. See package insert for full prescribing information.

*See following page for a brief summary of prescribing information.*

**KEY PHARMACEUTICALS, INC.**
Miami, Florida 33169 (USA)

# THEO-DUR™

## Zero-Order Anhydrous Theophylline

### Sustained Action Tablets

**Description:** THEO-DUR Sustained Action Tablets contain anhydrous theophylline, with no color additives.

**Actions:** The pharmacologic actions of theophylline are as a bronchodilator, pulmonary vasodilator and smooth muscle relaxant since the drug directly relaxes the smooth muscle of the bronchial airways and pulmonary blood vessels. Theophylline also possesses other actions typical of the xanthine derivatives: coronary vasodilator, diuretic, cardiac stimulant, cerebral stimulant and skeletal muscle stimulant. The actions of theophylline may be mediated through inhibition of phosphodiesterase and a resultant increase in intracellular cyclic AMP which could mediate smooth muscle relaxation.

**Indications:** Symptomatic relief and/or prevention of asthma and reversible bronchospasm associated with chronic bronchitis and emphysema.

**Contraindications:** THEO-DUR is contraindicated in individuals who have shown hypersensitivity to any of its components or xanthine derivatives.

**Warnings:** Excessive theophylline doses may be associated with toxicity; serum theophylline levels should be monitored to assure maximum benefit with minimum risk. Incidence of toxicity increases at serum levels greater than 20 mcg/ml. High blood levels of theophylline resulting from conventional doses are correlated with clinical manifestations of toxicity in: patients with lowered body plasma clearances, patients with liver dysfunction or chronic obstructive lung disease, and patients who are older than 55 years of age, particularly males. There are often no early signs of less serious theophylline toxicity such as nausea and restlessness, which may appear in up to 50% of patients prior to onset of convulsions. Ventricular arrhythmias or seizures may be the first signs of toxicity. Many patients who have higher theophylline serum levels exhibit a tachycardia. Theophylline products may worsen pre-existing arrhythmias.

**Usage in Pregnancy:** Safe use in pregnancy has not been established relative to possible adverse effects on fetal development, but neither have adverse effects on fetal development been established. This is, unfortunately, true for most anti-asthmatic medications. Therefore, use of theophylline in pregnant women should be balanced against the risk of uncontrolled asthma.

**Precautions:** THEO-DUR TABLETS SHOULD NOT BE CHEWED OR CRUSHED. Theophyllines should not be administered concurrently with other xanthine medications. It should be used with caution in patients with severe cardiac disease, severe hypoxemia, hypertension, hyperthyroidism, acute myocardial injury, cor pulmonale, congestive heart failure, liver disease and in the elderly, particularly males, and in neonates. Great caution should be used in giving theophylline to patients in congestive heart failure since these patients show markedly prolonged theophylline blood level curves. Use theophylline cautiously in patients with history of peptic ulcer. Theophylline may occasionally act as a local irritant to GI tract although gastrointestinal symptoms are more commonly central and associated with high serum concentrations above 20 mcg/ml.

**Adverse Reactions:** The most consistent adverse reactions are usually due to overdose and are:

Gastrointestinal: Nausea, vomiting, epigastric pain, hematemesis, diarrhea.

Central Nervous System: Headaches, irritability, restlessness, insomnia, reflex hyperexcitability, muscle twitching, clonic and tonic generalized convulsions.

Cardiovascular: Palpitation, tachycardia, extrasystoles, flushing, hypotension, circulatory failure, life threatening ventricular arrhythmias.

Respiratory: Tachypnea.

Renal: Albuminuria, increased excretion of renal tubular cells and red blood cells; potentiation of diuresis.

Others: Hyperglycemia and inappropriate ADH syndrome.

**How Supplied:** THEO-DUR 100 mg, 200 mg and 300 mg sustained action scored tablets are available in bottles of 100 and 1000; and in unit dose packages of 100.

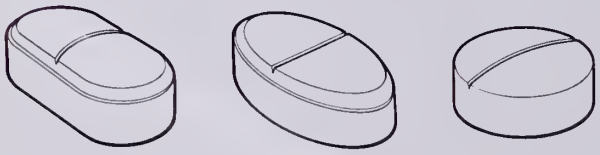
**Caution:** FEDERAL LAW PROHIBITS DISPENSING WITHOUT A PRESCRIPTION.

*For full prescribing information, see package insert.*

# ZERO-ORDER

## dc/dt=K™

## (Constant rate absorption by GI infusion)



300 mg 200 mg 100 mg

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# ALDOMET®
## (METHYLDOPA/MSD)

TABLETS: 500 mg, 250 mg, and 125 mg

MSD
MERCK SHARP & DOHME

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# Tenuate® ⓒ
(diethylpropion hydrochloride NF)

# Tenuate Dospan®
(diethylpropion hydrochloride NF) controlled-release

**AVAILABLE ONLY ON PRESCRIPTION**
**Brief Summary**

**INDICATION**: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

**CONTRAINDICATIONS**: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

**WARNINGS**: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. *Drug Dependence:* Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy*: Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children*: Tenuate is not recommended for use in children under 12 years of age.

**PRECAUTIONS**: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

**ADVERSE REACTIONS**: *Cardiovascular*: Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System*: Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal*: Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic*: Urticaria, rash, ecchymosis, erythema. *Endocrine*: Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System*: Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous*: A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

**DOSAGE AND ADMINISTRATION**: Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in midevening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.

**OVERDOSAGE**: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.
Cayey, Puerto Rico 00633

*Direct Medical Inquiries to:*
MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

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References: 1. Citations available on request—Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M.: A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.


**Merrell**

8-3921 (Y587A)

# Overweight may not always be simple... complications can develop.*

# Complicated or not...

# Tenuate® Dospan® ⓒⅣ

## (diethylpropion hydrochloride NF)

**75 mg. controlled-release tablets**

### A useful short-term adjunct in an indicated weight loss program.

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# Professional Liability Legal Update

## Statute of Limitations

In this malpractice action, the complaint stated that the patient began treatmnet for chronic lower abdominal pain in 1972, culminating in a total hysterectomy on July 17, 1973. Testimony revealed that her interim treatment consisted of two D&C's, exploratory surgery, and removal of her appendix and an infected fallopian tube. The pain continued and two other doctors examined her, one suggesting that the pain was psychological and the other suggesting scar tissue as the cause. It was further alleged that in the course of the hysterectomy, negligence was committed resulting in a ureteral blockage and a ureterovaginal fistula through which urine began to leak. The patient reported this condition to the defendant physician, the condition was diagnosed and she was hospitalized again in August, 1973. The defendant's affidavit stated that he told the patient of the diagnosis and that the probable cause was the hysterectomy operation of July 17, 1973. However, the patient testified that the defendant merely told her that something else had shown up on the x-ray and that the specialist he referred her to could better explain it to her. Upon inquiry by the patient, one of the subsequent treating specialists told her that sometimes the ureter "would just grow together" and the ureter could have punctured itself because of the pressure. After further hospitalization and apparent cure, the patient was released from the hospital on September 17, 1973. Notations in the hospital records indicated that the patient's condition followed the hysterectomy and had been caused by a ureteral injury. The defendant pleaded the defense of the statute of limitations and the patient responded that through the use of reasonable care, she should not have known of the injury until August, 1976, at which time she discovered a note in the hospital's accounting department indicating she had sustained a surgical injury occurring on or about July 17, 1973. Summary judgement was entered in favor of the defendant and the patient appealed.

In reversing, the appellate court held:

(1) There is a recognized fiduciary, confidential relationship of physician-patient imposing on the physician a duty to disclose known facts (as distinguished from mere possibilities or conjecture) relating to the nature and/or cause of his patient's adverse physical condition. Failure to do so will toll the statute of limitations.

(2) Although the hospital records indicated that the hysterectomy operation and the condition of the plaintiff after surgery were related, the patient's resulting condition, as opposed to her prior condition, was not so severe as to put her on notice of the possible invasion of her legal rights. Therefore, the contents of the hospital records were not, as a matter of law, imputed to the patient. *Tetstone v. Adams (1st DCA Fla., Case No. LL-124, June 13, 1979).*

## Physicians Countersuit

In this case, Attorney Tom Post of Miami filed the lawsuit on behalf of Dr. Stewart R. Bakst on the legal theory of malicious prosecution and negligence on behalf of the attorneys who had filed the original malpractice action against Dr. Bakst. The complaint alleged that Dr. Bakst is a radiologist and his only connection with the patient in question was to issue a report on certain x-rays that were taken relative to a fracture of the patient's finger. This case went on to be mediated and at the conclusion of the mediation hearing, was dismissed with prejudice by the plaintiff. The mediation panel was so outraged by the complete lack of any basis whatsoever for bringing this action against Dr. Bakst, that it issued a separate finding. The separate finding stated that no claim should have been made against Dr. Bakst and that evidence produced at the hearing disclosed that there was not even the slightest trace of evidence involving malpractice by Dr. Bakst.

Dr. Bakst then retained Tom Post as his attorney and the action was instituted against the patient and her attorney. The cause of action was for malicious prosecution and negligence on behalf of the attorney and was allowed to proceed after a motion to dismiss on the theory of malicious prosecution. After further discovery, the case was settled on the basis of a lump sum cash payment to Dr. Bakst. This case marks only the second time in Florida in which money has changed hands in one of these so-called physician countersuits. *Bakst v. O'Connor (11th Cir., Case No. 78-77, filed Jan. 3, 1978).*

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Prepared and submitted by John E. Thrasher, J.D., Vice President and Legal Counsel and Anthony J. McNicholas, III, J.D., Associate Legal Counsel, Professional Insurance Management Co. (PIMCO), Jacksonville, Florida.

# Dean's Page

# The Continued Evolution of the University of Miami/Jackson Memorial Medical Center

**E. M. Papper, M.D., Mr. Fred J. Cowell, and Bernard J. Fogel, M.D.**

The Editors of *The Journal of the Florida Medical Association* were gracious enough to feature the University of Miami School of Medicine in their October, 1976, issue. The Dean's Page described two significant achievements in the initial construction program of the University of Miami/Jackson Memorial Medical Center: the dedication of the new fourteen-story 383-bed West Wing Tower at Jackson Memorial Hospital, and the opening of the University's Anne Bates Leach Eye Hospital. Both of these facilities have already become national and international referral centers. Since our last report significant progress has been made toward creating one of the most modern medical centers in the nation. This is due in large measure to the strong support of the Public Health Trust Board and the excellent relations that have continued to evolve between the School and the Hospital. The following is a brief report on the progress being made at the University of Miami/Jackson Memorial Medical Center.

During the last academic year the School of Medicine received approval for a $1.3 million construction project which will enable us to complete the top two floors of the University of Miami Hospital and Clinics/National Children's Cardiac Hospital (UMHC/NCCH). The new facility will house the Comprehensive Cancer Center of Florida and the outpatient clinical activities of the Department of Obstetrics & Gynecology. This is the first step in converting the Hospital into the diagnostic center which was originally envisioned by the faculty many years ago.

Another important adjunct to the Medical School's educational facilities is the Edith and Earl Retter Education Center being constructed adjacent to the Anne Bates Leach Eye Hospital. The two story structure will feature a two-hundred seat audiorium physically connected to the Hospital by a pedestrian bridge and tied in electronically to permit two-way transmittal of audio-visual information. The completion of the education center, scheduled for December, will answer the long-time need of the Bascom Palmer Eye Institute to meet its continually expanding teaching commitments which have achieved international recognition.

Recently the School of Medicine opened its new Medical Training Center and Simulation Laboratory. This facility houses the cardiac manikin, "Harvey", which can simulate 50 heart diseases and offers our undergraduate and graduate medical students exposure to the most advanced training in the physical diagnosis of the cardiac system. Trainees from all over the United States have requested the opportunity to utilize the new facility.

On August 6th, 1979, the Public Health Trust will formally move into the new Primary/Ambulatory Care Center which was designed to replace, augment and centralize existing facilities providing basic health services to persons living near the Center. In addition to providing expanded and improved diagnostic and treatment services for outpatients, the Center will permit medical students and postgraduate trainees to obtain their education in a setting which truly simulates the

Dr. Papper is Vice President for Medical Affairs and Dean, University of Miami School of Medicine; Mr. Cowell is President, Public Health Trust, Jackson Memorial Hospital, and Dr. Fogel is Assistant Vice President for Medical Affairs, University of Miami School of Medicine.



The opinions stated on this page are those of the individual Deans and do not necessarily represent the policy of the FMA.

private practice model. The new $9.1 million resource was funded from a $3.7 million Department of Health, Education and Welfare grant to the University, $600,000 from Hill-Burton funds, nearly $300,000 from the National Cancer Institute and $4.5 million from the Decade of Progress Bond Issue.

Early this fall the first phase of the construction of the new Jackson Memorial Hospital Rehabilitation Center will be completed. Rehabilitative services will be housed in a three-story extension of the present building. The second phase of the project will include total renovation of all the older facilities and will be completed within another year. No other rehabilitation facility in the State of Florida has the capability of providing such a comprehensive range of services.

In May ground was broken for the new Maternal/Child Tower. The Tower, budgeted at nearly $40 million, has been likened to the last piece in a picture puzzle linking Jackson's hitherto sprawling physical facilities into a cohesive unit. This project will finish Phase II of the major reconstruction program that was initiated in 1972 with the Decade of Progress Bond Issue. Although there is no official third phase of the construction program, plans are already being made to turn the Center into a beautiful campus which will further enhance our image.

Obviously we are extremely proud of the tremendous progress that has been made toward providing excellent physical facilities. However, we are equally proud of the progress that is being made in accomplishing our primary objective of providing a single standard of high quality care to all patients regardless of their ability to pay. In the October Dean's Page presentation to *The Journal of the Florida Medical Association* we will outline the programmatic and professional changes being made in order to make our Medical Center equal to the best and most prestigious medical centers in the nation.

● Dr. Papper, University of Miami School of Medicine, P.O. Box 016960, Miami 33101.

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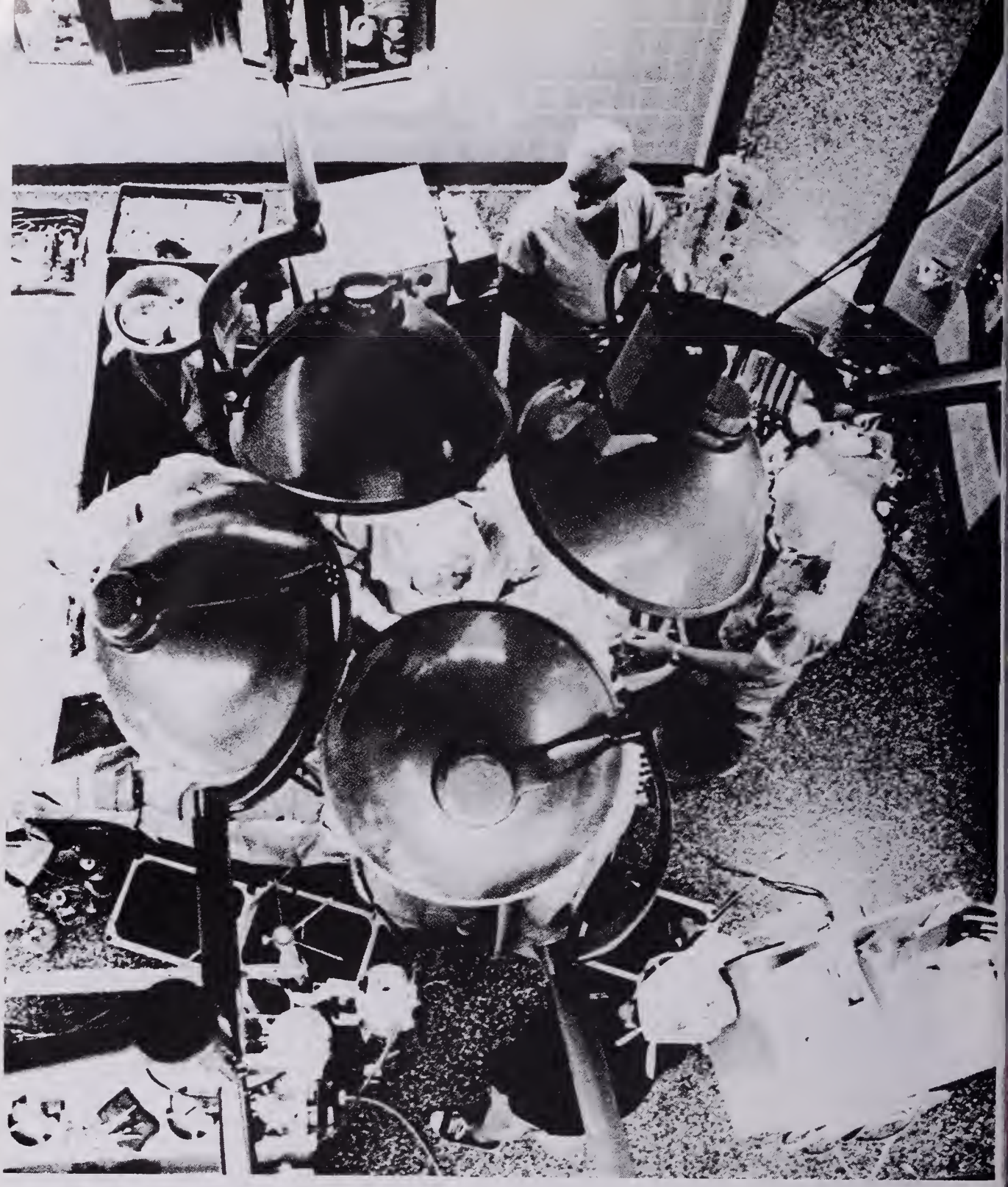
# American Physicians Art Association To Meet in Las Vegas

**The American Physicians Art Association will have its Annual Meeting in Las Vegas, November 4-7, in conjunction with the Annual Convention of the Southern Medical Association.**

**All physicians who work in the fields of painting, sculpture, photography, graphic arts, design and creative craft are encouraged to join the 500-member organization and participate in the annual exhibit.**

**Information about the Physicians Art Association may be obtained by contacting Milton S. Good, M.D., Treasurer, 610 Highlawn Avenue, Elizabeth, Pa. 17022.**



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# Historical Issue

**William M. Straight, M.D.**
**Historical Editor**

## *Something for Everyone*

*This year's Historical Issue offers a little something for almost everyone. For those who enjoy the nostalgia of country cures and patent remedies, there is a delightful article on self-treatment by Dr. Mark V. Barrow of Gainesville. For those who are turned-on by adventure and intrigue, there is a true narrative by Dr. Augusto Fernandez-Conde, a distinguished Cuban physician who fought Communism in his native land, and who upon escape to this country was promptly and unjustly imprisoned here. For the obstetrician, pediatrician and all parents, there is an interesting article on social attitudes toward the sudden infant death syndrome from the middle ages to the present, by Todd L. Savitt, Ph.D., of the University of Florida School of Medicine. For those who have an academic interest in Florida medical history, there is a biographical sketch of the eminent Florida medical historian, Dr. Webster Merritt of Jacksonville. This article includes a detailed bibliography of his writings. Finally, for the physician-stamp collector, there is an article on stamps and medicine by Allen F. Brewer, of Jensen Beach.*

# Self-Treatment Practices in North Florida

Mark V. Barrow, M.D., Ph.D.

The earliest self-treatment practices in North Florida were by the American Indians who occupied this area prior to the coming of Western Europeans. There are few if any scientific accounts of their methods of practice, but one can get some idea of the treatments by examining pharmacopoeias and medical texts published from 1825 through 1875, which list plants commonly used as a source of medication. One will note that many of these items are classified as old Indian remedies and used by Indians for various problems including: dyspepsia, wounds, skin conditions, syphilis, febrile diseases and the like. Many of these remedies were passed on to the early pioneers and traders as these people settled into North Florida.

Not only were Indian remedies used by the early settlers, other medicinal plants were discovered and used. These included medications and plant products imported from throughout the world. Typical of one of the home cures which used several plant products is the following recipe to cure the "dropsy", which was found in North Florida among a group of Civil War letters dating from 1860 to 1864.[1]

### Receipt to Cure the Dropsy

"Take one ounce of *Jallop,* one ounce of *Gambouge,* one ounce of *Sol Nitre,* one ounce of *Socret of Allows,* one ounce of *Medical Coperas,* take one-half of each of these medicines, mix them in nearly one quart of water ading some *Spirits* to prevent it from souring; shake it well and give a tablespoonfull three times a day just before eating until the water is carried off. Also take one ounce of *Sweet Spirits of Nitre;* one ounce of tincture of *Buech;* one ounce of *Balsam Copeovia;* mix these well with equal quantity of water aded. Take this preparation fifteen minutes every morning before breakfast, commencing with fifteen drops ading one drop more every morning until the dose is increased to twenty-five, then give one drop less until the dose decreases to fifteen drops. Continue to take this last preparation for some length of time after the water is carried off to prevent the water from returning; if the pulse is very high give about twenty-five drops of the tincture of *Digutallice* every day to regulate them."

A search of various pharmacopoeias and dispensatories of the 19th century yielded the following information regarding the recipe. *Jallop* (jalap) and *gambouge* (gamboge) were powerful carthartics and diuretics; *sol nitre* (sal nitre/potassium nitrate) had diuretic, antihypertensive and diaphoretic effects; *socret of allows* (socotrine aloes) was a strong purgative as was *coperas* (copperas/iron sulfate); *sweet spirits of nitre* (spirit of nitric ether) was a known antihypertensive and diaphoretic agent, while *buech* (buchu) was a diuretic and diaphoretic containing glycoside compounds and *balsam copeovia* (balsam of copaiba) had profound cathartic and diuretic effects and induced salivation. *Digutallice* (digitalis purpurea) slows the pulse and improves the strength of cardiac contraction. Some nine ingredients were used in this home remedy to combat dropsy or congestive heart failure including cathartics, diuretics, antihypertensives, diaphoretics and medications which induced salivation. In recent years the treatment of congestive heart failure has been salt and fluid restriction, digitalization and diuresis. Only very recently has it been pointed out that antihypertensive or vasodilator therapy may be of benefit. Who knows that in some future time perhaps the cathartic, diaphoretic and salivation mechanisms of ridding the body of excess fluid and salt may once again be considered in certain situations?

### Medicines Used in the Confederacy

During the Civil War period medications were most frequently obtained from two sources. First, medicinals were purchased by the office of the Surgeon General of the Confederate States and packaged for field and hospital use. Second, directives were sent to all Confederate units to gather and process or send in local wild plants of medicinal value. Surgeon Francis Peyre

Porcher, a distinguished botanist and medical practitioner of Charleston, was directed by the Surgeon General to compile a treatise on the medicinal resources of the southern fields and forests.[2] This volume which supplied details upon over four hundred trees, plants and shrubs of medicinal value was first published in 1863 and copies were sent to Confederate surgeons throughout the South. Newspapers were invited to copy remedies from it so that the civilian population might also use them. Several examples from this treatise are:

> *Wild Jalap (Podophyllium peltatum L.)*-if this can be found, it can be used as a laxative.
>
> Blackberry roots (*Rubus villosus*)-a decoction will check profuse diarrhea of any kind.
>
> Thoroughwort or boneset *(Eupatorium perfoliatum L.)*-drank hot during the cold stage of fever and cold as a tonic and febrifuge, is thought by many physicians to be even superior to the dogwood.
>
> Willow *(Salix alba)* as a substitute for quinine. It is quite sufficient in the management of many of the malarial fevers that would prevail among troops during the warm months.
>
> Sassafras (*Sassafras officinale*)-whenever a soldier suffered from mumps, pneumonia, bronchitis or catarrhs, the company nurse was directed to procure the roots of sassafras and make a tea.

## Folk Remedies in North Florida Today

To explore the use of folk medicine today, the older residents of Lafayette County in North Florida were recently interviewed regarding their self-treatment practices.[3] It was found that in 1970 some ten percent of the adult population were still using folk medicines on an occasional basis. Thirty percent of these used patent medicines at least once a day. When the common names of the folk remedies were obtained, the actual plants were brought to the interviewers and taken to the herbarium at the University of Florida in Gainesville where they were identified. Again using old pharmacopoeias and dispensatories the recommended indications of these remedies were checked against their use by the residents of Lafayette County. The recommendations of the pharmacopoeias and the usage by the residents were amazingly similar in at least twenty-two instances.

Some examples of these similarities are: Virginia snakeroot *(Aristolochia serpentaria)* to purify the blood, gopher grass (*Chrysopsis graminifolia*) as a fever grass and remedy for gout, dog fennel (*Eupatorium compositifolium)* as a fever tea, low bush myrtle (*Myrica cerfera*) as a tea to maintain labor, poke weed *(Phytolacca americana)* as a root tea made to be applied to ground itch, trumpet plant *(Serracenia minor)* as a tea from the root to be used for indigestion or diarrhea, sassafras *(Sassafras albidum)* as a tea made from the root to build up the blood, queen's delight *(Stillingia sylvatica L.)* as a tea made from the root to purify the blood, mullein *(Verbascum thapsus)* used as a tea from the leaves for swelling of the feet, prickly ash *(xanthoxylum clavaherculis)* used as a root tea to clear venereal disease and periwinkle *(Vinca maior)* used as a tea made from the dried plant for a blood tonic. In recent years the Virginia snakeroot has been shown to have, compounds with possible anti-tumor activity and the perwinkle is the plant from which two anti-tumor agents, vinblastine and vincristine, are obtained.

## Early Pharmaceutical Efforts

It was only natural that some entrepreneur would gather the medicinal plants and package them for sale in the old country stores (Figure 1). These materials could be purchased in the drug and grocery stores from the late 1800's through the early 1900's. The packages were clearly labeled with the common name and scientific name on the edge of the package. Also on the label were instructions for the preparation of the medication and the indications for its use. A listing of several of these is given below:

Bugleweed (*Lycopus virginicus*)

Synonyms: Sweet bugle
Part employed: The herb
Habitat: The United States
Properties: Astringent and sedative; useful in diarrhea and pulmonary hemorrhage and nervous irritation.
Dose: Wineglassful of an infusion one ounce to the pint

Figure 1

Couch grass *(agropyrus repens)*
Synonyms: Dog grass or quick grass
Part employed: The rhizome
Habitat: Europe, widely naturalized
Properties: Diuretic; for irritable bladder and urogenita diseases.
Dose: Wineglassful one ounce to the pint of an infusion.

Sweet Marjoram (*Origanum majorana*)
Synonyms: Marjolane
Part employed: Leaves
Habitat: Portugal
Properties: Stimulant tonic and emmenagogue; the hot infusion is used to stimulate the menstrual function.
Dose: Wineglassful of an ounce to the pint of infusion.

Chestnut leaves (*Castanea vesca*)
Synonyms: American chestnut
Properties: Astringent. Useful in treatment of whooping cough
Dose: Decoction of one-half ounce to the pint of boiling water.

Barberry (*Berberis vulgaris*)
Synonyms: Jaundice tree
Part employed: Bark of the root
Habitat: Europe but naturalized in the United States
Properties: Tonic and laxative for jaundice and malaria and torpid conditions of the liver.
Dose: Wineglassful of an ounce to the pint of an infusion.

Garden celandine *(Chelidonium majus)*
Synonyms: Tetterwort
Part employed: The herb
Habitat: Europe
Properties: Stimulant, diuretic and purgative, useful as in dropsy and to remove fluid. Also an external application of the infusion is useful in contusions.
Dose: Wineglassful of an ounce to the pint of infusion.

Life everlasting *(Gnaphalium polycephalum)*
Synonyms: Balsam wood, motherwort, cudweed
Part employed: The herb
Properties: Useful for bowel complaints, coughs, colds, bleeding of the lungs and to produce perspiration.
Dose: Two tablespoonsful of one ounce to the pint of infusion.

Butternut (*Juglans cinerea*)
Synonyms: white walnut, oilnut
Part employed: The inner bark
Properties: A gentle cathartic without griping and also an anthelmintic given with benefit to remove roundworms.
Dose: Wineglassful of two ounces to the pint of infusion.

These medicines were designed to be purchased, taken home and prepared in the kitchen or at the bedside. Surprisingly a resurgence of interest in roots and herbs has occurred and many of these "natural medicines" can be found in the health food stores today.

## Homeopathic Remedies

Homeopathy originated with the theories of Samuel Christian Friedrich Hahnemann (1755-1843) who obtained a medical degree in Germany in 1779 and published his treatise in 1796 "On a New Principle for Ascertaining the Curative Power of Drugs." After experimenting with many drugs on himself and others, he formulated a method of therapy based on the premise that the most effective way to treat disease was to use drugs or other agents that produced the symptoms of the disease in healthy persons. He formulated the Minute Dosage Rule which stated that the smallest amount of medication that would produce the desired effect was the most desirable. He and others of the period suggested that the more a drug's action matched the disease symptoms the less was needed to stimulate the body to heal itself. With the cholera epidemic of 1831 he became famous and moved to Paris. In America homeopathy became popular around the time of the Civil War and by 1900 there were twenty-two schools of homeopathic medicine in this country. In the early 20th century the popularity of homeopathy began to decline in this country although it is still practiced in some areas of Europe and Southeast Asia and there are still a few homeopathic physicians living in the United States today.

Probably no single individual capitalized on the homeopathic medicine concept as thoroughly and profitably as F. Humphreys, M.D. (Figure 2). Dr. Humphreys not only published numerous books on the subject which most often simply advertised his compounds but he also sold medical cabinets containing a full assortment of his compounds individually packaged and ready for sale. On the front of the cabinet was a list of medical problems and opposite each the appropriate medicine which was contained in the cabinet. (Figure 3). These cabinets were displayed in many country stores during the early 1900's. The cabinet which is illustrated contained remedies for at least thirty-five different medical problems including fevers, worms, teething, diarrhea, cholera, coughs, neuralgia, headaches, "the whites" (profuse periods), rheumatism, malaria, ophthalmy (sore eyes), catarrh, whooping cough, general debility, dropsy, kidney diseases, diseases of the heart, and chronic congestions. When one purchased an item from the cabinet one also received a copy of Dr. Humphreys' manual filled with testimonials of patients who had taken his medicines with great benefit and a list of still other medicines he had for sale. Dr. Humphreys did a thriving business for at least thirty or forty years and three generations of Humphreys' specifics were produced and distributed in rural America. Initially Humphreys' remedies were packaged in small round vials. Later he changed to square boxes and still later to flat bottles.

One of Dr. Humphreys' specifics useful for the menstrual cramps can still be found in country drugstores, Humphreys' Number 11.

Figure 2

## Veterinary Remedies

Dr. Humphreys was not the only one that capitalized on the use of medicinal cabinets displayed in country stores. A veterinarian, Dr. A. C. Daniels (Figure 4) was equally enterprising in the veterinary medicine field. His veterinary medicine cabinets were identical in size to Dr. Humphreys' cabinets but contained compounds to be used on animals such as horses or cows. Some of his remedies were: Colic Cure, Absorbent Blister, Ostercoccus Linament, Carbo-Negus, Gall-Cura, Hoof Dressing, Physic Ball, Renovater Powder, Fever Drops, Wonder Worker Linament, Hoof Grower, Linament Powder and Witch Hazel. Whole cabinets could be bought or you could buy the individual item. Daniels also published numerous booklets containing instructions for the use of his products and general information for farmers and ranchers. He also freely advertised his products on large tin or wooden signs along highways and rural roads (Figure 5).

The beginning of the end of the heyday of Drs. Humphreys and Daniels and their ilk came with the passage of the first of the Food and Drug Acts in 1906.

Figure 3

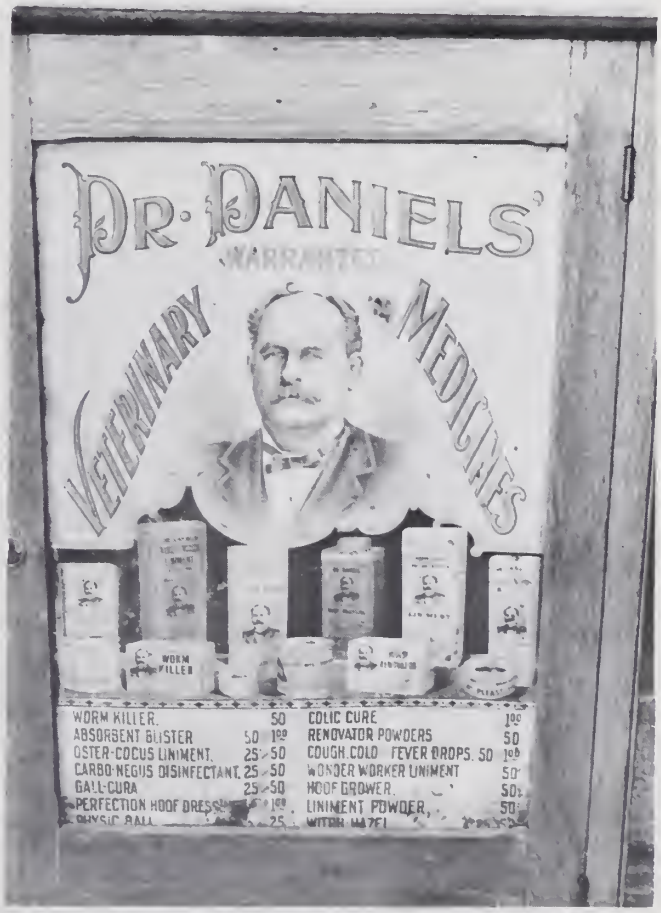


Figure 4

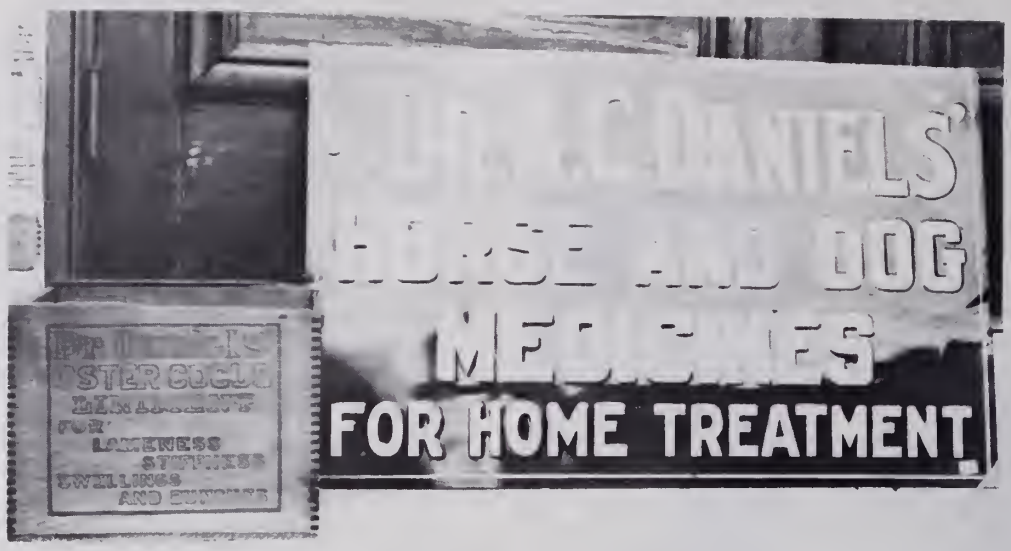


Figure 5

The regulations of the Food and Drug Administration set up by this act required that all medicine labels must specify the true contents of the medicine. This drastically altered the sales of homeopathic and patent medicines. Since 1960 the FDA has also required proof of efficacy as well as safety so there is little place for these remedies today.

### In Summary

In reviewing the self-treatment practices of North Floridians from the early days of settlement to the present time three phases seem evident. First, were the time honored plant remedies passed down by the Indians or brought with the settlers from Europe. These were based largely on medicinal plants which could be gathered from the fields or grown in an herb garden, processed in the home and administered upon directions given by word of mouth or the family medical guide. The second phase began when certain entrepreneurs organized the gathering, processing, packaging and distribution of dried powders of medicinal plants. The third phase involved a more sophisticated organization complete with extensive advertising and the sale of full medicine cabinets in country stores complete with a book of instructions for the use of each item. With the tremendous advances in pharmaceutical research during the past fifty or so years and the every-tightening regulations relating to safety and efficacy the role of self-treatment with medicinal plants and patent remedies is threatened with extinction. Yet there are today those who continue in these practices and those who are trying to capitalize on these practices.

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• Dr. Barrow, 1130 N.W. 64th Terrace, Gainesville 32601.

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**Use beet juice to cure kidney stones.**

**Boil watermelon seeds and drink tea for pus in kidneys.**

**Make tea of pumpkinseeds. Take to encourage kidneys to act.**

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# One Cuban Physician's Odyssey

Augusto Fernandez-Conde, M.D.*

Like many others in Cuba I thought of Fidel Castro as Cuba's one hope for a democratic government free of corruption. To that end I supported him in his struggle against the government of Fulgencio Batista. When Castro came from the Sierra Maestra, January 1, 1959, I cheered as did many who later felt outraged.

In February of that year when he became sick with pneumonia, I attended him at the urging of his secretary, Celia Sanchez, reputed to be the most powerful woman in Cuba. Her father, Dr. Manuel Sanchez Silveira, was my cousin and was a distinguished Cuban physician. As Castro's physician I made frequent trips to his penthouse at the Havana Hilton Hotel, for he refused hospitalization. Having verified my diagnosis by a portable chest x-ray, I proposed injections of penicillin. At first Castro refused for he had a firm dislike of needles however he ultimately agreed when I suggested that injections of penicillin would cure faster than oral penicillin. I also gave him injections of Benadryl and phenobarbital to help him sleep. Under Celia's nursing care and my medical direction he rapidly improved.

Thereafter he frequently consulted me when he was ill or if he had problems with the Cuban Medical Association (Colegio Medico Nacional de Cuba). At that time as a past president of the association, I sat on the executive committee and could serve as a go-between for Castro. Fidel has a quick and analytical mind, an excellent memory and great personal charm. He was volatile at times, that is the Cuban temperament, but he would encourage his advisers to speak their minds, listen attentively and then decide his policy. Once the decision was made it was not wise to disagree with him too insistently. Initially he seemed open and honest and seemed to value and respect my thoughts upon problems of medical care. As you will see, I soon changed this judgement.

On my visits to his penthouse for medical or social reasons I began meeting well-known Cuban Communists such as: Carlos Rafael Rodriguez, Antonio Nunez Jimenez and Severo Aguirre. Then finally one day Fidel introduced me to Dr. Ernesto (Che) Guevara, the internationally known Argentine Communist. Indeed, on a later visit I gave Che Guevara intravenous aminophylline to relieve a severe asthmatic attack. At times when I called upon Castro matters of state were discussed before me and occasionally I was invited to express an opinion upon the matter at hand. Of course I was very guarded in my remarks for I was beginning to doubt Castro's professions of being for democracy. Fidel publicly protested at this time that his revolution was "not red but green as the royal palm," a symbol of the Cuban countryside. After the Bay of Pigs invasion Fidel no

Augusto Fernandez-Conde, 1979

*Editor's Note: The narrator of this article is a distinguished Cuban physician who is an active member of the Dade County Medical Association and has served as delegate to the Florida Medical Association. The narrative is published to record an account of the destruction of the Cuban Medical Association and events in the life of a physician who actively opposed the Communist take over.

longer made a pretense of being for a democratic government and publicly announced that he had been a Communist from the very beginning.

When Castro first came to power the Cuban Medical Association supported him enthusiastically and he was friendly toward us. However, the man Fidel appointed as minister of health, Dr. Julio Martinez Paez, who had been a major in the Rebel Army (Castro's army), began persecuting doctors he suspected of being Batista supporters. When the Cuban Medical Association protested this in April 1959, the Communists began their campaign to destroy the association.

At this point, still believing in the democratic form of government and angry at having been deceived, I joined the underground against Castro. I became one of the leaders in the most powerful of the many underground movements, The Revolutionary Movement of the People* (Movimiento Revolucionario del Pueblo). Although I don't think Castro or his police knew of my underground activities at this time, Fidel was daily less friendly toward me. A friend in the inner circle of the security force warned me: "Augusto, take good care of yourself because the Communists have been influencing Castro against you."

At that time I was serving as the Latin American representative on the council of the World Medical Association (WMA). I had been elected to this position in 1957 during the General Assembly of the WMA in Istanbul, Turkey. My wife and I went to the annual meeting of the council in Sidney, Australia, in April 1959, and used this as an excuse for a two month trip around the world. At various cities where we stopped I was interviewed by newspaper reporters. I was very careful to speak well of Castro and his government but despite this, upon my return to Havana, Castro's door was almost closed to me.

The Communist campaign to destroy the Cuban Medical Association was a carefully planned one. They began by founding a party within the association known as the Medical Party of the Revolution (Partido Medico de la Revolucion). To speed the growth of this faction they went about the country intimidating physicians by such tactics as jailing them on trumped up charges and releasing them only on condition that they support the party. Meanwhile the Communist controlled press bombarded the public with false and misleading articles vilifying the leaders of the Cuban Medical Association and eroding the respect of the Cuban people for the medical profession.

These efforts climaxed at the annual meeting of the Cuban Medical Association at Santiago de Cuba in December 1959. In the days before the meeting was to convene, members of the Medical Party of the Revolution (MPR) tried to keep delegates from attending the convention by threats of physical violence and jailing. When the assembly convened members of the MPR strode up and down the aisles in the green fatigue uniforms of the Rebel Army with bullet belts and pistols around their waists. Here and there, by thinly veiled threats, they coerced the more timid delegates to support Communist candidates. MPR leaders attacked me personally as a representative of the executive committee which gave me the podium for rebuttal. At every opportunity I tried to hand it back to them as vigorously as they had given it to me. The evening of the first day, it had been a stormy one, I went to dinner then to a strategy meeting. About four in the morning as I was walking to the house of a relative with whom I was staying, a physician known to me who had been a captain in the Rebel Army approached me. In few words he let me know that I would live longer if I curbed my attacks on the MPR. He did not intimidate me but the following day at the assembly despite my vigorous protests I was kept off the podium by colleagues who feared for our lives.

The MPR prevailed at the General Assembly by a mere twelve votes out of six hundred. Once in control they first abolished the annual meetings of the association and then the executive committee. The association's headquarters building in Havana was taken over by the government and the headquarters buildings of the municipal medical associations throughout Cuba were similarly expropriated. Finally on May 10, 1966, The Cuban Medical Association ceased to exist and all physicians were incorporated into the Federation of Medical Workers (Federacion de Trabajadores de la Medicina) which includes nurses, technicians, nursing aids and hospital workers in general.

The Cuban people generally respected the medical profession as well as their own physicians and many were shocked at the Communist treatment of the medical profession. Some of the more influential people spoke out against the injustices but their voices were not heard in the government controlled media. Many physicians tried to correct the lies and misleading statements of the government but few were the editors who would risk printing our side of the story.

Let us go back to September 1960, and the annual general assembly of the World Medical Association in West Berlin. The MPR, then in control of the still existent Cuban Medical Association, appointed five staunch Communists as delegates to the Berlin meeting. As Latin representative on the council, I was entitled to attend but the Communists planned that I would be denied

*Other major underground "movimientos" include: Movimiento 30 de Noviembre, Movimiento de Recuperacion Revolucionaria (MRR), Movimiento Democrata Cristiano, Unidad Revolucionaria, and Directorio Revolucionario Estudiantil.

**President of the Eleventh General Assembly of the World Medical Association, September 1955. (Dr. Conde in the white jacket)**

permission to leave Cuba. Learning about this and with the help of my underground connections I slipped out of the country and when the delegation filed into the assembly room, they were surprised to see me sitting on the speaker's platform.

Later during this meeting the leader of the Cuban delegation gained the floor and accused Dr. Louis Bauer, past president of the American Medical Association and the Secretary General of the WMA from its founding, of being a puppet of American imperialists. Then they introduced a resolution requiring that all member countries deny doctors who had emigrated because of political persecution, the right to practice medicine within their borders. This was intended to discourage the steady stream of disenchanted physicians leaving Cuba.

When they had finished, I was given the floor for a rebuttal and I informed the assembly of the calculated persecution of the medical profession by the Cuban Communists. The French delegation gave a similar account of the persecution of French physicians during the revolution in Algeria. The resolution was overwhelmingly defeated and the Cuban delegation stalked out of the assembly in protest.

After that angry display several of my friends on the council and in the West German delegation urged me not to return to Cuba for they feared I would at least be imprisoned, and at worst might be executed. Chancellor Willie Brandt, pleased by my vigorous opposition to Communism, personally urged me to stay in West Germany and offered all the help I might need to establish my life there. Perhaps more confident than I should have been, I chose to return to Cuba.

To my surprise I was allowed to enter Cuba without the slightest hindrance, however police were now stationed outside my home and office. At times my home and office had apparently been searched during my absence, but nothing was taken. In the afternoon of April 19, 1961, two days after the ill-fated Bay of Pigs invasion, upon returning to my house with my wife, Maria, and my sister-in-law we were all arrested and marched three blocks to the G-2 prison. The Communists had expropriated a block of private residences and converted the houses into administrative offices and prisons for detention of political prisoners.

We were placed in a house which had formerly belonged to the Dean of the Law School of the University of Havana and which fronted on Fifth Avenue in the Miramar section of Havana. This three-story building would have been crowded with one hundred people, now three hundred were confined in it. Fifty or sixty women were on the top floor and the men occupied the other two floors. We had to sit and sleep on the floors without cushions, mattresses or covers of any sort. Indeed, we slept in shifts as there wasn't sufficient room for all of us to lie down at the same time. Each floor had a single toilet and there was a constant line of people awaiting their turn. Old newspapers served both as toilet tissues and towels. Baths were not available. The food was chiefly ground beef and rice which we ate with our fingers for tableware was not provided.

These were bad times in Cuba. After the Bay of Pigs invasion the militia rounded up over a half million people suspected of being subversive and detained them in makeshift camps. Baseball and soccer stadiums, theaters, private clubs and public buildings in addition to private homes were pressed into service. As in our prison the facilities were inadequate and the food limited, causing untold suffering of innocent people. Many became despondent and withdrawn, some became hysterical and cried day and night, and some were constantly fearful that they would be executed. During the days immediately after the invasion a loud radio speaker blared day and night giving the Communist version of the day's events and often giving long lists of the names of those captured or killed. In this bedlam it was almost impossible to sleep. Informers were salted among the prisoners and some of the more talkative incriminated themselves. One doctor I knew fell into this trap and spent the next ten years in Castro's prisons. Most of the prisoners including Maria, my sister-in-law and me were never charged and were finally released, after about a month of detention.

Maria, my sister-in-law and I walked the three blocks to our house and as we turned up the walkway we saw nailed across the door a sign reading: "This House Belonged to a President of the Cuban Medical Association During Batista - No Entrance!" In anger I ripped the sign down and we entered to find the house stripped and vandalized. Many things were missing, the cushions on the remaining furniture had been slashed, my books were strewn about the floor and the walls were defaced. Behind the entrance door I found a portable television which must have been forgotten as one of the vandals left in haste. Curiously about two hundred dollars in United States currency, which my wife had been collecting, was left untouched. Perhaps the vandals thought the money was cursed or perhaps they were afraid it would bring trouble with the Communist police. At any rate Maria's coin collection came in handy for us.

Realizing I was being constantly watched I did my best to maintain a low profile, while living with friends. After a few days I went back to my job as assistant clinical director of my hospital, La Esperanza. With great caution I renewed my underground contacts and quickly learned that I was scheduled to be eliminated by Castro's hit squad at the opportune moment.

In the late morning of August 11, 1961, I was at my office in the hospital when I received a telephone call from one of the underground agents at the Havana's Jose' Marti airport. The caller, whose voice I recognized, told me that due to an unusual emergency the afternoon Freedom Flight must leave early and would have many empty seats. He proposed to put me on the passenger list as Augusto Julio Fernandez. As there would be a rush to get the plane off the ground he thought he could slip me past the militia and aboard the plane. On the other hand if I were recognized, it would certainly mean prison and possibly death. With scarcely a moment to make the decision, I decided to risk it for to remain in Cuba at that time seemed to mean death and I was no longer of use to the underground because of the close surveillence I was being subjected to.

First, I telephoned my wife, who by good fortune was at home, and arranged for her to bring my passport to the air field. She was to give it to one of our agents there and he in turn would give it to me. These arrangements worked smoothly although I did not again talk with Maria or see her until sometime later in Miami.

Having made these arrangements, I left my hospital office without speaking to a soul and drove to the airport. Upon arrival I was given my passport and made my way to the area where embarking passengers were searched then awaited loading. Everything was taken from me but the clothes I wore and a cheap watch I still possess. As I milled around in the crowd trying to be inconspicious, I suddenly saw a black policeman who fortunately was not at that moment looking my way. I knew he would almost certainly recognize me for I had eluded him when I slipped through Castro's guards to go to Berlin a few months before. He had let the word out that this would not happen again. During the next half hour, until the loud speaker called for Augusto Julio Fernandez to board, I played cat and mouse with him and never let him out of my sight. By good luck he never recognized me and finally the time came to board.

As we lined up for the final clearance, my underground informant was standing next to the militiaman and it was he who looked at the passports and read off the names. The militiaman then checked the passenger manifest for the name. As I approached and handed my passport to the agent he cursorily scanned it and read off, "Augusto Julio Fernandez." The militiaman found my name on the manifest and waved me on. I scurried up the ladder, found a seat in the plane, buckled myself in, the plane lifted off and ninety minutes later we landed at the Miami International Airport. Then a new and unexpected obstacle appeared.

As we deplaned we were taken to the office of the United States Immigration and Naturalization Service. There we were fingerprinted, photographed and interviewed. While most were promptly cleared and released to join their waiting relatives, I and several others were loaded on a bus and taken to the Opa-Locka Naval Air Station where the Immigration Service maintained a detention center.

Life at Opa-Locka was pleasant but not just what I had in mind. We had clean bunks, good food, games and recreational facilities and each day a trip to be

interviewed. The interrogators were Spanish speaking Americans who questioned us minutely about our past lives in Cuba, our families, our political philosophy, political connections and our reason for coming to the United States. Very soon I suspected my interrogators had considerable knowledge of my past and were being coached to trip me up. Once they looked at my passport they knew my true identity and they seemed to know of my opposition to the Batista government. They accused me of being a Communist and cited my service as Castro's physician, my relationship to Celia Sanchez and a trip I had made as representative of the World Medical Association to Poland and Russia in 1960 as evidence. My interrogators also knew of my opposition to the Communist take over of the Cuban Medical Association but this seemed to make little difference.

Friends in the Miami Cuban Community came to visit me and told me I was being represented to the immigration officials as a Castroist. My friends had protested vigorously and had even obtained a letter from Dr. Louis Bauer verifying that I had made the Poland-Russia trip as one of two representatives appointed by the council of the World Medical Association and not because of Communist leanings. Despite these efforts my release was not forthcoming and it was only weeks later that I learned the reason for this.

After three weeks at Opa-Locka one day I was told to collect my belongings for I was leaving immediately. At last, I thought, they are going to release me, but very shortly I found myself aboard a plane with eight other Cuban men bound for Houston, Texas. Upon landing we were taken under guard to the Harris county prison for an overnight stay. Again we were photographed, fingerprinted, our clothes and belongings searched, and we were stripped naked and our bodies examined even to a rectal examination looking for hidden drugs or weapons. The following morning we were again herded aboard an aircraft and flown to the U.S. Immigration Detention Camp at McAllen, Texas.

The McAllen camp looked like the pictures I had seen of Nazi concentration camps during World War II. Several acres of land had been enclosed by a high chain link fence topped with barbed wire. At appropriate intervals around the perimeter were wooden watchtowers equipped with powerful searchlights and machine-guns and manned twenty-four hours a day. Within the enclosure were a number of wooden barracks and an administration building. Milling around were several hundred prisoners in a green prison garb with a large yellow "P" painted on the back and front.

As our bus from the airport unloaded, many of these prisoners lined the fence shouting obscene remarks and threats of physical and sexual violence at us. Having heard stories of prisoners being attacked by other prisoners and raped or even killed, I was very apprehensive at this point. As I learned later these threats were crude attempts at humor rather than serious threats. The inmates of this camp were all foreigners awaiting deportation. Some were pretty tough characters and several had committed murders and served time for their crimes but most were merely illegal aliens. Most were Mexican "wetbacks" who had slipped across the border seeking a better life. Some of these regularly traveled this circuit for with each trip they enjoyed several weeks of food, lodging and convivial company while their papers were being processed.

Again we were stripped, fumigated, forced to shower in cold water on a cold night, our bodies examined, our belongings searched and then issued the green prison garb. I was assigned to a barracks of forty beds and inmates who were all Latins from Cuba, Central America and South America. The buildings were old and while adequate as shelter they were infested with huge rats. Rats have always repulsed me so now with plenty of free time, I began a campaign to eradicate them. I built a box trap which I baited with cheese from the mess hall. When I captured a rat I dropped him into a large rainwater barrel just outside the barracks where he ultimately drowned. I developed quite a reputation as a rat dispatcher and on a peak night drowned five of the nasty beasts.

My fears of physical violence never materialized but of course I was careful not to provoke an attack. Indeed, the only acts of violence during my stay there were one or two fist fights between Cubans of differing political beliefs. The Mexicans were poor and uneducated and seemed to respect all Cubans. The other nationalities were represented by small numbers who made little contact with the Cubans.

The worst part of the McAllen camp was the food. It was tailored to a spare budget and the tastes of the Mexicans. Most commonly we had highly seasoned enchiladas and frijoles which I could barely eat. Meat was infrequent and of the cheapest cuts; one of these was beef heart, a new and unpleasant experience for me. I lost sixteen pounds during the several weeks at McAllen.

The officers of the camp were as accommodating as they could be toward me and when I broke a tooth, even took me to a dentist in the town. One pleasant memory was a visit from a member of the executive committee of the Texas Medical Association. He had learned of my detention from friends of mine in the American Medical Association and came to see if he could be of help. He commiserated with me and appalled at my gaunt physique, sent me a large bottle of multiple vitamins which he hoped would build me up.

In mid-October 1961, the McAllen camp was closed and the sixteen Cuban prisoners were moved by border

patrol plane to a Federal prison at El Paso. Here life was even less pleasant and the inmates were chiefly hardened criminals. The food was less appetizing and the administrative officers and guards less interested in our welfare. Again there was the threat of physical violence and this time it seemed more real. While there we were repeatedly visited by three Cuban physicians who were members of the Texas Medical Association and who brought food and toilet articles. Most of all, they did their best to boost our sagging morale.

Without warning one day in the first week of October 1961, a visitor came to my cell. He was a reporter for The El Paso Times seeking information about the Cubans at the El Paso prison. He told me that a reporter for *The New York Times,* Tad Szulc, had visited the Miami Cuban community to gather material for a report on how the Cuban refugees were faring in the United States. In the course of interviews with many of the leaders of the anti-Castro groups and others including my wife, Maria, Szulc had learned of our internment at El Paso and had requested him to get our story. This reporter listened to us then sent the material to Szulc who told it on the front page of *The New York Times.*[1] Our story also appeared the same day on the front page of *The El Paso Times* and the more than one hundred newspapers throughout the country that subscribed to the New York Times News Service.

It was Tad Szulc who supplied the missing piece of the puzzle that explained my unjustified incarceration in this country. From his information I learned that the chief of the interrogators at Opa-Locka was a Cuban who had been Director of the Bureau of Repression of Communist Activities during the last of the Batista administrations. This man knew me well for I had been outspoken in my opposition to the brutality and corruption of the Batista government. I had made headlines in Cuban and American newspapers by publicizing the murders of two Cuban physicians by Batista police because they had treated wounded anti-Batista insurgents.[2] For perhaps personal reasons, for he must certainly have known I was anti-Communist, he approved a recommendation that I be imprisoned and ultimately extradited.

This man was well suited for his role as one of the Batista secret police chiefs. He had a good mind and memory and plenty of hatred for those who opposed Batista. During his nearly twenty years of association with the various Batista governments he had gained an extensive knowledge of the Communists in Cuba and knew which ones were to be persecuted and which as friends of Batista were to be permitted to operate. Despite his long association with Batista the papers in this country said that he had, "...not been personally identified with the tortures, murders and other excesses of the Batista dictatorship."[1] In this same article it is said that he was making no secret of his identity at the office of the Immigration and Naturalization Service in Opa-Locka, but he was certainly careful not to make his identity known to me in the weeks I was detained there for we would have recognized each other on sight.

This man had many enemies in Cuba and with the fall of Batista he had to leave. He fled Cuba the same night as Batista, December 31, 1958, going first to the Dominican Republic and later to the United States. Although no one has acknowledged it, he probably obtained his position through American friends and with the idea that he would be able to identify Communists who wished to enter this country disguised as Cuban refugees. At that time Cuban refugees were entering this country at the rate of one thousand each week.

The article by Tad Szulc came to the attention of Robert Kennedy who was then Attorney General. Incensed at what appeared to be a betrayal of the promises of his brother, President John F. Kennedy, he personally telephoned the administrator of the El Paso prison and ordered the release of the Cubans there. Immediately we became celebrities of a sort. The administrator visited us and did his best to provide for our comforts and local newspaper men came to write our story. About a week later we were all flown back to the Opa-Locka Naval Air Station for final processing and release. There remained an order for my deportment which was finally resolved some weeks later.

During my last days of detention at the Opa-Locka Air Station I was called into the office of the chief of the Immigration and Naturalization Service. He informed me I was about to be released and that my name had been cleared after a thorough investigation. He then added that I was not to discuss my treatment during detention with any of the news media. At this point I became furious and pointed out that I could not believe it had taken two and one-half months to determine that I was neither a criminal nor a Communist. Further I could not accept having been thrown in with common criminals and treated as one of them. He was half-way apologetic but reiterated his demand that I remain silent. This I did not promise to do but fortunately the opportunity to speak out never presented itself. What of the Batista policeman who wreaked vengeance upon me? Together with influential Cubans and Americans I believe I was instrumental in sharply reducing his authority although he continued to work for the Immigration and Naturalization Service until his death five years ago.

The remainder of the story is anticlimactic but for those who wonder about the outcome and the beginnings I will detail it briefly. Upon release I joined my wife in the Cuban community of Miami. Through the help of Dr. Louis Bauer I obtained a position on the staff of a tuberculosis sanitarium at Oneonta, New York, and Dr.

Bauer even sent airline tickets for Maria and me for we literally had no money. At first I worked as a laboratory technician for income until I passed the examination of the Educational Council for Foreign Medical Graduates (E.C.F.M.G.). Still hanging over my head was the order for my deportment which had been issued while I was detained in Texas. On the advice of the Miami office of the Immigration and Naturalization Service, Maria and I went to Windsor, Canada, where we were given visas for residency in the United States. We then attempted to re-enter the United States with what we had been told were the proper papers. However, the office of Immigration at the border detained us as possible Communists again. After some hours of trying to convince the agent, he called the immigration office in Miami and we were finally cleared to enter this country.

Having successfully passed the E.C.F.M.G. I was appointed to the medical staff of the sanitarium at Oneonta and worked there as a physician until the spring of 1962. At this time a position on the staff of the Florida State Hospital at Chattahoochee became available and we moved to Florida with all our belongings in a rickety second hand car. I served as chief of the tuberculosis wards at Chattahoochee until 1968 and during this period I passed my Florida State Medical Board Examination. Also during this time I became a naturalized citizen of the United States. In 1968 I moved back to Miami to accept the position of Chief of Tuberculosis Control in the Dade County Public Health Department and have occupied this position since.

For those who are interested in the beginnings I will outline my life in Cuba before Castro. I was born in Manzanillo, Oriente Province, in October 1913. My father started as an accountant in a bank and was gradually promoted to an executive position. My mother bore fourteen children, raised them with little help and still managed to live into her nineties. During my earliest years my father was doing very well financially but then came the economic slump after World War I and he lost all his savings as well as his position with the bank failure. He went to work as a private accountant and was able to accumulate some rental property and gradually the family's economic position improved. I finished elementary education in the public school and Cordoba Academy at Manzanillo, then the family moved to Havana where I completed high school. Despite our limited resources, seven of the fourteen children obtained a college education and two of these became professors at the University of Havana.

In 1930 I was supposed to enter the University of Havana but the students revolted against the government of President Gerard Machado so he closed the university from 1930 to 1933. This was a time of bitter economic depression. I worked as a clerk in a government office for twenty-four dollars a month, had but a single suit and a single shirt and my shoes usually had holes in them. Even though a steak and potatoes could be had for twelve cents, I often could not afford them. Fortunately I had a good friend and fellow student whose family were better off and who invited me to dinner frequently for they knew I was not eating regularly.

During this period I spent much of my free time in the library and tried my hand at writing poetry and short stories. Several of these efforts were published in local literary magazines. I joined a group of literary minded young people in a society, "Union de Avance," devoted to philosophical discussions and writing. The group was soon denounced by the Machado police as revolutionary and ordered disbanded. Some of the others and I joined the underground against Machado, were captured and were imprisoned for a month in the Castillo del Principe prison. We were well treated and on release told to behave ourselves in the future.

The Machado government fell in 1933 and when the university was reopened in 1934, I entered as a first year student. These were turbulent times both economically and politically. As the university students frequently were vocal in support of or opposition to political regimes, the

Medical Student at The University of Havana

school was repeatedly closed for periods of time. I was one of the vocal students and served as president of my class and as a member of the Directory of Students, a committee that made policy decisions affecting the high schools of Havana and the University of Havana.

Finally, in 1940 I completed medical school and entered an internship and residency in internal medicine at the "Mercedes" and the "Calixto Garcia" hospitals. This was followed by two years of training in pulmonary diseases at the "La Esperanza" hospital in Havana and a two year fellowship in pulmonary disease in various hospitals in the United States. It was during these years that I published scientific papers on pulmonary diseases and a monograph on pleural tuberculosis. Later I published a book on the history of the Cuban Medical Association.

My active work with the Cuban Medical Association began during my years of hospital training. As an enthusiastic and vocal worker I served in various capacities including the presidency during the years 1954 and 1955. When Fulgencio Batista ousted President Carlos Prio Socarras (1952), a good man and a believer in democracy, I joined the underground against Batista. During my term as president of the CMA I had great difficulties with Batista and finally in October 1957, I denounced the Batista government from the platform of the World Medical Association in Istanbul.[3] Upon my return to Havana I was escorted to prison immediately, however friends close to Batista negotiated my release in twenty-four hours.

My story is not unique in these troublesome times nor is it told for self-aggrandizement for there are many good and brave men who have suffered more for our country than I. It is told so that the good people of this country who have been gracious to me and my countrymen will have some knowledge of how the Communists take over a country. I would like to remind my American friends that their most precious possession is government of the people, by the people and for the people in a free democratic society, but for this to survive they must each accept their full measure of civic responsibility.

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# Cracker Cures

## SNAKEBITE

**Scratch wound until it bleeds and catch a toad, cut it in half, and apply to wound to draw out poison.**
**Cut wound, fill with gunpowder and ignite.**
**Japanese oil will cure rattlesnake bite.**
**Soak in kerosene enough to cover bitten part.**
**For rattlesnake bite, use pure olive oil; take one large spoonful and bathe the wound in it.**
**For scorpion strike, apply a daub of earth to the area.**
**For a rattlesnake bite, make a poultice of raw onion and apply as soon as possible. Give patient four to five ounces of strong whiskey.**

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# The Social and Medical History of Crib Death

Todd L. Savitt, Ph.D.

**Abstract: SIDS has existed for many centuries, though its true nature was not recognized until the 1940s. People described and interpreted its manifestations in social rather than medical terms as the smothering of children by their bedclothes or the overlaying of infants by their parents. In both explanations, parents were considered culpable, and labeled negligent. Up until the 18th century alleged overlaying and smothering were handled by Church courts. As secularization, urbanization, and industrialization of Europe occurred, civil courts tried such cases of death. With the development of pathological anatomy, a new theory — enlarged thymus — relieved parents of the burden of guilt for negligence. Not all practitioners accepted the thymic theory. Several concepts of the cause of sudden infant deaths coexisted by the 1890s, each with attendant social consequences for parents and nurses. Developments in the last 30 years have improved our understanding of SIDS so that it is now a recognized cause of death.**

History is more than a compilation of dates and facts on a particular subject. Though it is important to locate people and events in time and place, it is also necessary, in attempting to understand these people and events, to set the scene by, for instance, noting societal trends, or analyzing intellectual and political thought. By looking carefully at the context in which an event occurs we can better explain causal factors and assess significance.

We can apply this broad approach to developments in medicine and learn a great deal about the state of both medicine and society at selected times in the past. In the discussion which follows we will look closely at a condition which has existed since ancient times and which has had a varied history owing to changes in societal attitudes and medical knowledge over the centuries. This condition is Sudden Infant Death Syndrome (SIDS), commonly known as crib death (cot death in Britian).

As the term implies, SIDS is not well understood. Medical scientists are presently unable to explain the precise cause of this disorder, though they are able to describe with more clarity its usual manifestations and epidemiologic patterns. The Second International Conference on Causes of Sudden Death in Infants (1969) defined SIDS as: "The sudden death of any infant or young child which is unexpected by history, and in which a thorough post-mortem examination fails to demonstrate an adequate cause for death."[1] It is the leading cause of post-neonatal (28 days to one year) deaths in the United States, accounting for some 8,000 to 10,000 deaths annually or two to three deaths for every 1,000 live births. Stated another way, SIDS causes about one-third of all post-neonatal deaths in this country. Studies have shown that a few deaths occur among children during the first few weeks of life, that the number gradually increases to a peak between two and four months of age, and that deaths decline in number over the next several months until the age of 12 to 15 months. More deaths occur in the colder months of the year than in the warmer ones. Almost all deaths occur during sleep. SIDS strikes blacks and American Indians more frequently than Oriental Americans and whites, and occurs more often among families of low socio-economic status. Other details relating epidemiological, physiological, and psychological factors to SIDS are still under study.[2-4]

The sequence of events in a typical crib death is as follows:

> An apparently thriving two-month-old boy is found dead face down in his crib. Except for a brief mild rhinorrhea during the previous week, the child has been in excellent health from birth.

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> At a routine well-baby check by the family doctor a few days prior to the event, he appeared robust and free of problems. On the night of death, he took his formula eagerly and was put down in his crib about 10 p.m. His mother looked in before retiring; he was sleeping peacefully on his abdomen with his face to the side. When found at 6:30 a.m., he had obviously been dead for several hours.[5]

In other cases, parents sleeping with an infant awaken to find the child dead and assume that, as one distraught mother wrote to a physician, "I had smothered her sometime during the night."[6] The response from community members had too often been negative and accusatory: they assume the parents have been negligent and careless in managing the child, or worse, that they have actually abused the infant. William J. Curran described one such instance during the 1972 Congressional hearings on SIDS:[7]

> A mother testified that her baby was left in the house in a closed room with a policeman guarding the door until late in the day when an "investigator" for the Medical Examiner's Office appeared and viewed the infant and questioned the parents. Such questions were asked as "How many times did you hit the baby?" "Did your other child choke or in any way abuse the infant?" "Did you let your dog bite the baby?"

It was not until the mid-1940s that medical researchers recognized SIDS as a distinct entity, and the 1960s and even the 1970s before physicians and the public generally accepted its existence. Because of this lack of recognition of SIDS until recently, parents or nurses of children dead of this disorder have been held responsible and punished or not depending on religious and societal attitudes of that period.

Is it possible for a historian to identify SIDS in Renaissance Florence or 19th century America? Using both descriptive and quantitative evidence, it can be shown that most infant deaths attributed to either accidental overlaying of the child by parent or nurse while sleeping, or to accidental smothering of the child in its own bedclothes, pillows, or covers, were actually instances of SIDS. Descriptions of these phenomena from all periods bear a striking resemblance to the modern case history mentioned above. For example, an overseer and a planter on a Virginia plantation wrote the following about the death of a slave infant:

> I (Nathaniel Ryan, overseer) am sorry to inform you (Edmund Hubard, slaveowner) that Matilda has lost her youngest child she over laid it, it was well and hearty when she went to bed and found it dead sometime in the night.[8]
>
> Last week (wrote Robert Hubard to his brother, Edmund) Tilla overlaid/when asleep/ and killed her youngest child — a boy 6 or 7 months old. This was no doubt caused by her own want of care and attention.[9]

A 16th-century Florentine couple claimed to church authorities that they had smothered their child "accidentally while sleeping, and without any consciousness on their part of killing." quoted in 10 A 17th-century English lady wrote in her diary: quoted in 11

> It pleas'd God to take away my sonn Richard, being now a moneth old, yet without any sickness of danger perceivably, being to all appearance a most likely child; we suspected much (that) the nurse had overlayne him; to our extreme sorrow, being now againe reduced to one; but God's will be done.

An official board of inquest in 17th-century Plymouth Colony decided of a 6-month-old child found dead in bed lying between its nurse and sister that "either it ws stiffled by lying on its face or accidentally over layed in the bed."[12] This descriptive evidence resembles typical cases of SIDS reported in the present-day medical literature.

The quantitative data is also convincing. Using the fact that age at death of known SIDS victims ranges from two weeks to about 15 months with a peak between two and four months, information culled from a Virginia state census for 1853 to 1860[13] compares quite favorably with statistics from a modern SIDS study.[14]

Dr. Arnold Paltauf of Vienna presented tables, in an 1889 article on sudden unexplained infant deaths, showing that 59% of these children died between the ages of two and four months.[15] A Surgeon of Police in Dundee, Scotland, reported in 1892 that of 258 instances of "overlaying" investigated between 1882 and 1891, 60% (154) were children two to four months old, and 62% (159) occurred between October and March, the cold months of the year.[16] Two years later, the editors of the *British Medical Journal* complained about the high number of overlaying deaths during the winter:[17]

> Every year, especially on the nights following some general holiday in the colder parts of the year, a large number of infants meet with their deaths in their mothers beds, being "overlaid," or more probably suffocated under the bedclothes, during the sleep . . . of their mothers.

It is significant that most historical writing on infant overlaying or smothering has arisen from studies of infanticide and child welfare.[10,11,18-20]

Given the relative frequency with which the intentional destruction of infants occurred in the Western world up until the 20th century and the impossibility of differentiating between accidental and

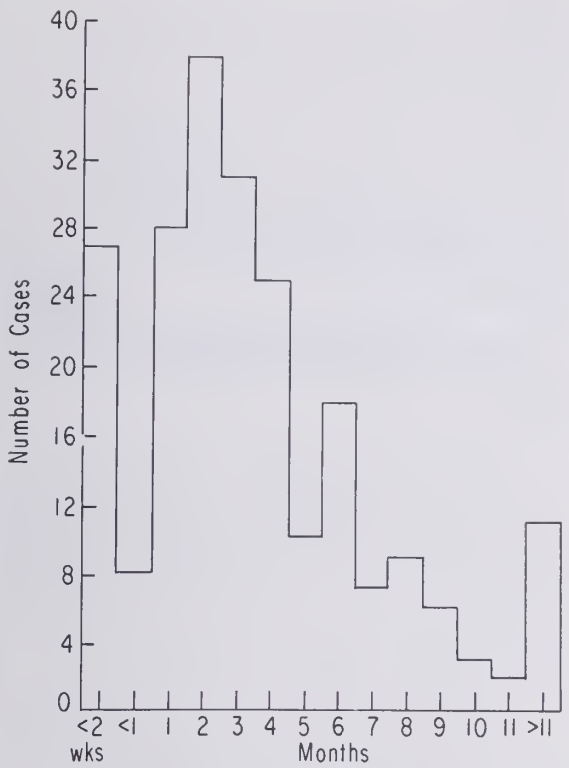


**Fig. 1.—The age distribution of 226 cases of smothering, suffocation and overlaying in Virginia, 1853-1860. (From: Savitt, T. L.: Smothering and Overlaying of Virginia Slave Children: A Suggested Explanation. Bull. Hist. Med. 49:402, 1975.)**

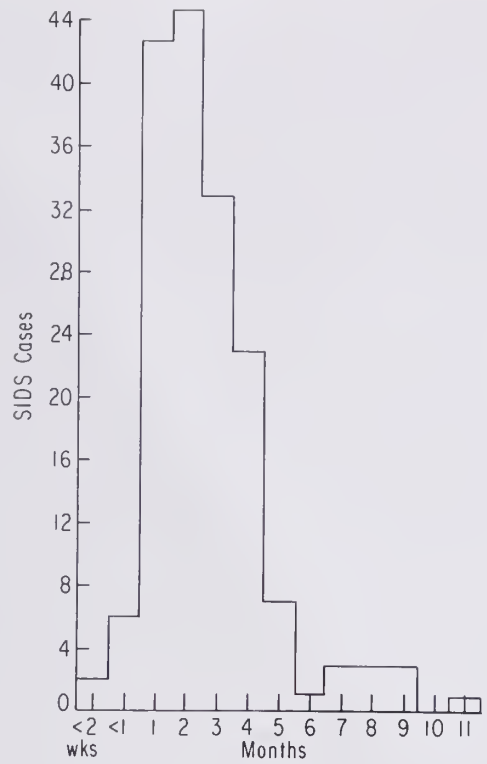


**Fig. 2.—The age distribution of 170 SIDS cases in King County, Washington, 1965-1967. (From: Bergman, A. B.; Ray, C. G.; Pomeroy, M. A.; Wahl, P. W. and Beckwith, J. B.: Studies of the Sudden Infant Death Syndrome in King County, Washington. III. Epidemiology, Pediatrics 49:863, 1972.)**

intentional infant suffocation without the aid of forensic pathology, it should not be surprising that infanticide is often mentioned in the same breath with overlaying and smothering. Poverty, sexism (male oriented society), insanity, life insurance money, illegitimate children, unwanted pregnancies, and hostility toward children were all causes for infanticide from the early Middle Ages (7th century) to the end of the 19th century (and, more than likely, beyond). Little more will be said on the general subject of infanticide other than that it was a major problem the magnitude of which historians are still exploring.

What is of interest here is the attitude people had toward the overlaying and smothering of infants in various places and periods of history, and the way in which society expressed these attitudes. It is necessary to watch for any change in the explanation proposed for these infant deaths. During the course of this discussion, two points will be made. First, sudden unexpected and unexplained infant deaths were not matters in which the police and the courts showed a great deal of interest until about the 17th or 18th century. Prior to this, overlaying and smothering were matters dealt with by parents and church (rather than civil) officials. Second, these infant deaths were considered a social rather than a medical problem until the early 19th century, and as such, were not the subject of anatomical or physiological scrutiny until that time.

How was accidental suffocation viewed and treated during medieval times? First, it should be noted that overlaying was, according to a recent historian, "the principal means of infanticide and the major problem for the Church courts" during this period.[18] In ecclesiastical legislation overlaying was associated with infanticide despite the usually recognized accidental nature of the incident. The law assumed that negligence or carelessness had to be involved in overlaying, and that despite the parents' lack of intent to kill, a church crime had been committed which required punishment. The degree of punishment could be lessened for such unintentional infanticide, but absolution was out of the question.[18] Throughout the medieval period and on into the Renaissance, ecclesiastical rather than secular courts handled cases of infanticide, including accidental suffocation.[10,20-21] And always, the punishment meted out for both intentional and accidental infanticide, was far lighter than for murder of an adult. As early as about 700 A.D., the precedent for a lighter penance in cases of overlaying than of accidental adult murder had been

established. The former required a penance of three years, one of them on bread and water, whereas the latter required similar punishment for five years, three of them on bread and water.[22]

This apparently easy attitude toward infant life as demonstrated both by the total absence of secular, criminal prosecutions in cases of infanticide, and lighter punishments for accidental deaths of infants compared to adults is also expressed in a set of a 14th-century instructions for English parish priests. In these instructions, casually inserted along with failure to be a good samaritan and quarreling with one's wife is the venial (pardonable) sin of overlaying one's child.[20] Still, overlaying — recognized as accidental — was regarded as a sin to which parish priests were alerted. "The aim of the Church" in punishing overlaying, writes a historian, "clearly extended beyond chastisement for sin. It extended to the protection of children's lives."[18] That the Church was interested in preserving the life of the child is indicated by the many injunctions in medieval Church legislation against parents taking infants into their beds upon pain of punishment should overlaying occur.[21]

Attitudes toward and penalties for suffocation of infants did not alter much during the Renaissance. Penance was still required, but harsher punishments were meted out in 16th century Florence to unwed mothers whose infants were suffocated and old women accused of being witches who killed children and replaced them in parents' beds. To protect infants from accidental smothering in bed clothes, Florentine craftsmen developed a device called an *arcuccio* (little arch) which fitted over the crib and prevented the blankets from lying directly on the child.[10]

It also contained cut-outs on either side so that the mother or nurse could breast feed the child during the night without the fear of rolling over and smothering it. This device apparently gained some acceptance in England during the 18th century, as its specifications appeared both in a book on the "Art of Nursing" in 1733 and in an article in the *Philosophical Transactions of the Royal Society of London* at about the same time.[11] It was still in use in parts of Italy in the 1890s.[17]

As we move into the more modern period, there is a transition from prosecution for infanticide in ecclesiastical courts to secular courts. This change paralleled the gradual movement away from Church authority during the Enlightenment, and the increasing ability of medical personnel to perform autopsies on infants and to determine the causes of death. Certainly by the early 19th century, and probably earlier, civil and coroner's courts were investigating cases of overlaying and smothering to determine causes of death.[23]

It was at this time, the turn of the 19th century, that a new concept of the cause of these infant deaths arose.

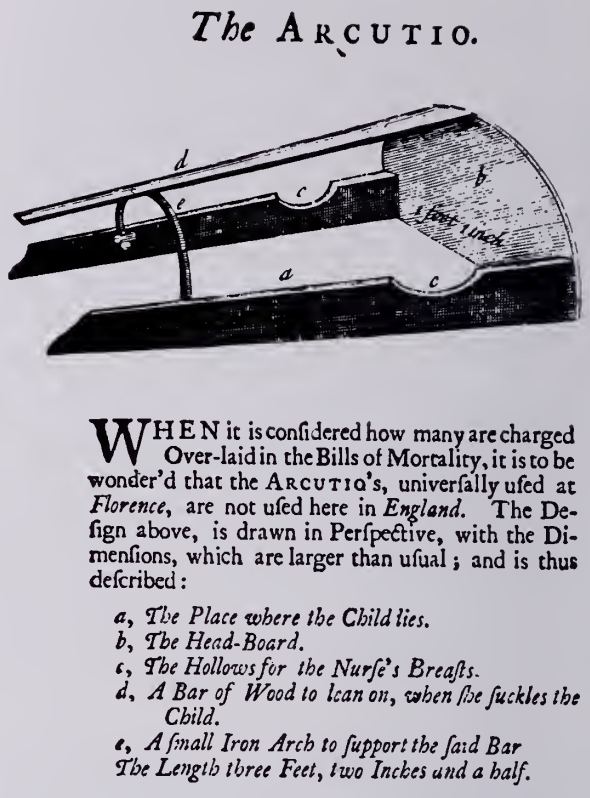


**Fig. 3.—The Arcuccio as depicted in an 18th century English drawing. (From: Caulfield, E.: The Infant Welfare Movement in the Eighteenth Century. Ann. Med. Hist. n.s. 2:484, 1930.)**

As clinicopathological correlations, popularized by publication in 1763 of Giovanni Morgagni's *On the Seats and Causes of Disease*, and pathological anatomy, as taught at the French medical schools beginning in the 1790s, began to influence medical thought, several physicians noted that the thymus glands of infants allegedly overlaid or smothered were quite large. They postulated that the gland (a) impinged on the trachea, cutting off the airway or the blood supply to the head, (b) somehow caused adverse stimulation of nerves controlling respiration, resulting in suffocation, or (c) grew so large as to reduce the size of the thoracic cavity, thereby affecting function of both heart and lungs. The condition became known as "thymic asthma" and gained some acceptance both in Europe and America. Interestingly, however, bills of mortality for the United States, England, Scotland, and Sweden during the period up to 1860 (when the thymic theory was first attacked) still used such terminology as "overlaid," "suffocated," and "stifled in bed."[24]

Some medical theories, once accepted, die slowly. Despite the fact that further medical investigations into the normal state of the thymus by a German physician (Alexander Friedleben) revealed in 1858 that this organ could in no way cause the sudden death of an infant, there were those who persisted in their thymic beliefs.[25] In 1889 a Viennese physician, Arnold Paltauf, elaborated on the thymic theory, claiming that a complex of bodily changes based on nutritional and constitutional deficiencies was the cause of sudden deaths of infants alone in cribs or in beds with parents. He called this diathesis *status thymico-lymphaticus*.[15] Not until 1931 did a committee of pathologists study this condition and conclude that it had no "existence as a pathological entity."[26]

While some doctors were searching for medical explanations for sudden infant deaths, others continued to accept the age-old beliefs of smothering and overlaying. The following statement appeared in an 1872 female domestic medical guide:[27]

> One cause of death to which infants are peculiarly liable, and which alone is said to have destroyed forty thousand children in England between the years 1686 and 1799, is being overlain by the parents. For this reason, some physicians caution the mother against having the infant in bed with her while she sleeps.

But when death of a healthy infant occurred in the absence of both mother and bed clothing, doctors had to find some other explanation. The thymic one fit their needs for a while. No doubt the thymic theory created a more humanitarian attitude toward nurses and mothers accused of negligence, as this German case from the 1880s indicates:[2]

> Grawitz describes a case, in which a servant girl was entrusted with the care of an infant who was sleeping in its cradle near her. In the morning the previously healthy baby was found dead in the cradle. The girl was imprisoned, and the authorities ordered an autopsy, which was performed by Liman & Grawitz. Liman was unable to disprove Grawitz' contention that death was attributable to a colossally enlarged thymus pressing on trachea, bronchi, and vessels. The magistrate released the woman . . .

The situation as to the cause of sudden unexplained infant deaths was quite confused toward the end of the 19th century. Contrast the above statement from Germany in the 1880s with this one by the Surgeon of Police of Dundee, Scotland, in 1892:[16]

> The principal causes producing this great mortality from overlaying are — 1. Ignorance and carelessness of mothers; 2. drunkenness; 3. overcrowding; and 4. according to some observers, illegitimacy and the (life) insurance of infants.

He advocated passage of a law prohibiting parents from bringing their infants to bed with them, and also the strenuous prosecution of parents whose children died under these conditions. Compare this attitude with that of two French writers in 1895 who claimed that nurses should not be blamed for smothering or overlaying infants. Their research showed that specific respiratory ailments were the true cause of death:[28]

> You know that, in what is called "capillary bronchitis" or "suffocating catarrh of children" (Laennec), intense pulmonary congestion now and then occurs, which places the child's life in jeopardy for several hours. When the child is strong, and is more than seven or eight months old, it seldom dies of the first attack of congestion. But when the age is less than six months, death may occur in the first attack.

In 1889, the *Philadelphia Medical Journal* printed the following story:[29]

> Overlaid her Child. — Mrs. Thomas Lawlor, an intemperate woman living in an east-side tenement, was commited to the Tombs last week by Coroner Bausch, charged with being responsible for the death of her infant of six weeks. The complaint was made by the husband, who declared that she was intoxicated on going to bed, and that in the morning the baby was found dead. He added that this was the third child that had died as a result of her wilful negligence.

Finally, to add to the uncertainty, the *British Medical Journal* published a letter in 1905 on sudden death and the thymus gland which closed with the following statement:[30]

> In (Sir William) Osler's (textbook of) *Medicine*, under "Diseases of the Thymus Gland," it is stated that enlargement of the gland is a recognized cause of sudden infant death in infants, owing either to its direct pressure on the trachea or to its pressure on the pneumogastric (vagus nerve) causing spasm of the glottis.

So confusion was rife as the new century began.

Research continued during the early 20th century as more physicians recognized that there were other possible explanations for these infant deaths. But still parents and nurses were often blamed for negligence in the care of their children who died of what people assumed was overlaying or suffocation in bedclothes, sheets, pillows, etc. A statistician for the United States Public Health Service for instance, reported the national and regional mortality from "accidental mechanical suffocation" of infants under one year of age between

1925 and 1932, and broke down the figures for the Southeast by race. Though never stated, the implication was clear that the much higher rate of deaths for black infants was thought to be due to less adequate care by their mothers.[31] Well-meaning physicians reinforced the belief in negligence as a cause of sudden infant deaths in articles which emphasized means of preventing them. A New York physician, working under the auspices of the Special Committee of Infant Martality, condemned, in a 1944 issue of the *Journal of Pediatrics*, the practice "of placing for feeding the unattended infant in its mother's bed where death from overlaying may be caused by the mother who falls asleep." He also noted that inattention to the style, weight, and fit of infant clothing, and the misuse of pillows, rubber sheets, easily untucked sheets and blankets, and unnecessary decorative articles for cribs and carriages were potential causes of infant suffocation.[32]

It was just at this time, the early 1940's that the whole concept of mechanical suffocation of infants was carefully studied and challenged. Doctors Jacob Werne and Irene Garrow of the Queens County, N.Y. Medical Examiner's Office published a series of articles between 1942 and 1953 which demonstrated, using a series of autopsy findings and the research results of other medical scientists, that fulminating infection was the likely cause of alleged mechanical suffocations in infants. Their work summarized that of a number of researchers and drew widespread attention to the issue of sudden unexplained infant deaths.[28,33-35] Dr. Paul V. Woolley, Jr., of Portland, Oregon, writing in 1945, noted that children invariably find an airway regardless of the position in which they are sleeping or the impediments (blankets, sheets, breast, bottle, mother's body) put in their way, and so complemented the ideas of Werne and Garrow. His conclusion marked the start of a new era in thinking about sudden unexplained infant deaths:[36]

> We, as pediatricians, should take the lead in being a little more critical of the diagnosis and should reserve it for instances when actual deprivation of oxygen by mechanical means can be proved. Complete autopsy examination with full recourse to modern bacteriologic techniques should be demanded in every unexplained death of an infant. When this is done and still nothing is found, nor has incontrovertible evidence of suffocation been elicited, perhaps we should be pushed so far as to admit that we are ignorant of the cause of death, thereby saving the family the stigma of having allowed their baby to smother in the bedclothes.

Since then a growing knowledge of SIDS as a non-preventable condition has reduced the guilt of parents and created an entirely different atmosphere in which to conduct research. Public education about SIDS is the greatest need at present.

We have seen, in this brief history of crib death, that SIDS has existed for many centuries, though its true nature was not recognized until the 1940s and 1950s. People described and interpreted its manifestations in social rather than medical terms as the smothering of children by their bedclothes or the overlaying of infants by their parents. In both explanations, parents were considered culpable, and labeled negligent. The history of crib death is intimately tied to the history of infanticide, as intentional suffocation was a not uncommon manner of disposing of unwanted children. Up until the 17th or 18th century alleged overlaying and smothering were handled by Church courts, with penance or fines as the punishment. As secularization, urbanization, and industrialization of Europe occurred, civil courts tried such cases of death and often handed out harsher punishments. With the development of pathological anatomy, a new theory of the cause of these deaths — enlarged thymus — relieved parents of the burden of guilt for negligence. But not all practitioners subscribed to the thymic theory. Several concepts of the cause of sudden infant deaths coexisted at the end of the last century, each with attendant social consequences for parents and nurses. Developments in the last 30 years have improved our understanding of SIDS so that it is now a recognized cause of death. Only rarely are parents harrassed by authorities or looked down upon as poor child-carers by neighbors. The story of crib death is a useful one in which to trace the interrelationship of medicine and society.

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# Cracker Cures

## WARTS

**Tie a silk thread around the wart and wet every day with castor oil.**
**Rub an old bone on a wart and throw it over left shoulder and never look back.**
**Find an old bone out in the woods, rub wart with bone, lay it down and walk away.**
**Rub grain of corn on a wart and give it to a black hen.**
**Rub wart with fat meat and bury it in the full of the moon.**
**Pick a corn or wart and make it bleed. Place blood on a grain of corn and feed it to a black hen.**
**To get rid of a wart hide a straight pin so that you will never see it again.**
**Cut an Irish potato, and rub warts with this, then bury potato where the water falls off the eaves of the house.**
**Rub wart with a dry bone and leave bone where you found it.**
**Steal a tomato leaf and rub wart with it, then bury it and don't tell anyone.**

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# Florida's Medical Historian — J. Webster Merritt

William M. Straight, M.D.

For some the irresistible fascination is the landing of an eight hundred pound tuna on a fifty pound test line, for others it's bringing down a ten point buck at two hundred yards, and for still others it's a low score on a difficult eighteen holes. For John Webster Merritt it was chasing down and recording little known facts of Florida's medical past.

Before Web's time the only significant accounts on this subject were an address before the Florida Medical Association by T. M. Palmer[1] and a short paper by Henry Edwards Palmer.[2] In his time Web wrote nineteen articles on Florida medical history for the *Journal of the Florida Medical Association*,[3-21] one for the *Bulletin of the Duval County Medical Society*,[22] and one for the *Florida Historical Quarterly*.[23] He served as Editor and Historian of a volume commemorating the 100th birthday of the Duval County Medical Society which was published by the society in 1954.[24] He was chairman of the Writer's Committee of an illustrated book on the regrowth of Jacksonville after the devastating fire of 1901.[25] Finally his greatest work was the scholarly history of medicine in Duval County which was published in 1949.[26]

Web's enthusiasm for historical research and writing is clearly evident in the following lines taken from the preface to his volume, *A Century of Medicine in Jacksonville and Duval County*: "The task of collecting and assembling the material and of constructing the record has been fascinating, never laborious. His (the author's) highest hope is that all details of the work, by the test of time, will prove to be accurate and that the story itself will appeal to all types of readers."[26]

It seems likely that Web's interest in medical history began in medical school. He entered Johns Hopkins Medical School the year the Department for History of Medicine was organized under the professorship of William Henry Welch. Welch had an extensive knowledge of and an abiding love for medical history, and most importantly, he had the ability to arouse enthusiasm in students.

During Web's medical school days the history department also had from time to time as professors, resident lecturers and visiting lecturers three other outstanding historians: Sir d'Arcy Power, Fielding H. Garrison and Henry E. Sigerist.

In later life Webster told his wife, Elise, of the excitement these men aroused in him describing it as "most inspiring." From them came a desire to "try his hand at uncovering events and experiences in the lives of other dedicated physicians."

He was an orderly, methodical man who almost always went to bed after the eleven p.m. radio news broadcast and got up at six A.M. sharp. He felt at home in libraries, county courthouses, graveyards and the homes of old-timers, anywhere he might find new information or elaborate on old information. He made notes upon whatever scrap of papers was at hand but after checking their accuracy he methodically incorporated these notes into a card file from which came his articles and books. On his own he collected a valuable library of Floridiana: nine hundred seventy-nine bound volumes and over a thousand letters, pamphlets, folders and maps, which he used as references. These items are now available to

research scholars at the Haydon Burns Library, Jacksonville, under the designation: The Dr. J. Webster Merritt Memorial Collection.

Despite his methodical bent in collecting, checking and recording, when it came to writing the manuscript, he had to be in the mood. Usually he wrote in long hand, unusually legible for a physician, sometimes with marginal notes but seldom with crossed out words. He seemed to have clearly in mind the finished draft before he set down the first word. He was a compulsive editor and thus his writings are fluent, lucid and free of errors.

A large body of information on Florida medical history was not his only contribution to society. He was a highly competent, respected and busy Jacksonville physician. His medical education began at the Johns Hopkins University School of Medicine in the fall of 1929. Among his professors were E. K. Marshall, William Mansfield Clark, John Jacob Able, Lewis Weed, William MacCallum, Warfield T. Longcope, Dean Lewis, Hugh Young and other teachers and contributors to medical knowledge. His grades must have been excellent for upon graduation in the spring of 1933, he was awarded one of the six medical residencies on the Harvard service at the Boston City Hospital. During his eighteen months there he developed close friendships with Soma Weiss, Chester Keefer and Robert Wilkins each of whom have been outstanding physicians, teachers and scientists.

Upon completion of this residency Webster came to Jacksonville in 1936 to be associated with Drs. Edward Jelks and Turner Z. Cason at the Riverside Hospital. In 1941 he enlisted as a First Lieutenant in the United States Army Medical Corps. He was stationed at Camp Blanding but after a year was given a medical discharge because of a spot on his lung. Fortunately this spot remained inactive. He returned to civilian life and his association with the Riverside Hospital. Eager to do his part for the war effort he served as examiner of recruits, participated in Red Cross War Bond drives and was active in civil defense. Indeed, he received a commendation from President Franklin D. Roosevelt for his services in the civilian war effort. His association with the Riverside Hospital as an internist and cardiologist continued until 1955. About 1952 his health began to fail and the work of the busy hospital seemed too much for him. Therefore in 1955 he withdrew from this association and set up a private practice of internal medicine and cardiology at 2063 Oak Street, just across the street from the Riverside Hospital. Here he practiced until twenty-four hours before his death.

As a practitioner he was well liked and respected by both medical colleagues and patients. One of the internists who knew him best, and who upon Webster's death inherited many of Webster's patients, commented upon the unusual completeness and relevancy of his office medical records.[27] As a person he had a warm personality and was of a happy disposition with great charm.[28] Elise Merritt describes him as a dedicated physician and almost too willing to make calls in off hours and in other ways accommodate his patients.

His knowledge of medicine was founded on a superb schooling and hospital experience and a lifetime habit of reading and study. In addition to his historical writing he wrote six articles on scientific subjects.[29-33] His professional associations included membership in the Duval County Medical Society, Florida Medical Association and the American Medical Association. He was a Diplomate of the American Board of Internal Medicine, a Fellow of the American College of Physicians, a Fellow of the American College of Cardiology, and a diplomate of the National Board of Medical Examiners.

He served his local medical society in various capacities chief among which were: Chairman of the Editorial Committee of *The Bulletin of the Duval County Medical Society*, 1944, and Vice President of the society in 1945. As we have seen, he also served as Editor and Historian of a volume commemorating the centennial of

The First Year Medical School Student

the society. Indeed, he was archivist for the Duval County Medical Society for 20 years, 1943-1963.

His major service to the Florida Medical Association was as Associate Editor of the *Journal* from June 1944 to June 1947, and as Assistant Editor from June 1947 to May 1961. During these years he wrote his articles on Florida medical history and a number of editorials or news notes for the Journal.*[34-45] An invaluable service he performed was the assembling of a full series of the Association's *Proceedings/Transactions/Journal*. The Jacksonville fire of May 3, 1901, destroyed the home of Dr. J. D. Fernandez, then secretary of the Association, and with it the only complete series of the *Proceedings*. In addition to this issues of later years were lost. With the help of Stewart G. Thompson, Managing Director of the Florida Medical Association, and by personal contacts, correspondence and advertisements in library journals, Webster finally assembled a complete series in January 1946.

Webster was a native-born Floridian. He was born at Gainesville at 12:55 A.M. on Saturday, August 11, 1906, to Claude Flarzell Merritt and Maude L. Webster at "The Pines," (723 N.W. 16th Avenue) the home of his maternal grandparents, Colonel Irving Elroy Webster and Hattie Barney Webster. His father was a thirty-one year old civil engineer working with the phosphate industry and the family lived in Lakeland but went to Gainesville for Webster's birth. When he was a month old they returned to Lakeland where they lived for a time. However, Claude Merritt did not take family responsibilities very seriously and absented himself for periods of time, finally leaving permanently when Web was twelve.

Webster's paternal grandparents were Jessie Merritt and Ada Jordan Merritt of Georgia. His maternal ancestors came from Massachusetts and were related to Noah and Daniel Webster. His great grandfather, Norman P. Webster, M.D. settled in Gainesville in 1870, and at sometime prior to 1883, moved to Jacksonville where he operated the Brooklyn Drug Store at the corner of the present Riverside Avenue and Leila until his death, June 5, 1892. Apparently the family continued to maintain their home in Gainesville for Web's maternal grandfather was a charter member of the local military company, The Gainesville Guards. Colonel Webster was active in the Guards throughout his life and served as Lieutenant Colonel of the First Florida Volunteers during the Spanish-American War. He was also an ardent Mason and served as Grand Commander of the Knights Templar of Florida in 1906. Web's favorite uncle, Wilbur

**His Parents and Siblings, 1910**
**(Children L. to R.: Harriet Ethel, Angus, Webster)**

P. Webster of Jacksonville, was also a prominent Mason and was Grand Secretary of the Grand Chapter of Florida at the time of his death in 1934. Web was active in the Demolay but he did not go further in the Masonic orders.

Webster had three sisters and a brother: Harriet Ethel (Mrs. Earl Arnau), Angus Merritt, Marjorie (Mrs. Herbert Winsor) and Gwendolyn (Mrs. E. B. Blount). Angus currently lives in a modern house on a corner of the family property in Gainesville.

By the time Webster had reached grammar school age the family had moved back to "The Pines" and Web's mother had found employment as a secretary in the College of Architecture at the University of Florida. She held this position until her retirement.

**The Pines, Gainesville, Florida, 1908**

*Several of the historical articles and most of the editorials are unsigned. His authorship was established from a list in the possession of Elise Merritt and affirmation of previous editors of the *Journal*.

To help support the family Webster worked during his high school years at the Vidal Drug Store. He helped open the store in the morning before school and made deliveries after school ended. He was an outstanding student at the Gainesville High School and in a state-wide competition won the first Groover-Stewart Scholarship in pharmacy. This provided $1,000 a year for three years enabling him to obtain a degree of Pharmaceutical Chemist (Ph.C.) and subsequently a license to practice pharmacy in Florida. While in the school of pharmacy at the University of Florida he also won the D. W. Ramsaur Gold Medal Award for the highest scholastic average in the graduating class. Pharmacy was not his ultimate goal, however, so he continued a fourth year and obtained a degree of Bachelor of Science and at the same time was elected to the Florida Beta Chapter of Phi Beta Kappa.

Although it might seem so, it was not all work and no play during Webster's youth. He found time to become so proficient at tennis that he won an intramural tennis championship at Florida and later a southeastern tennis title, and also to become an excellent swimmer. In later life he took flying lessons and obtained his private pilot's license. At the University of Florida his social fraternity was Kappa Sigma and at Johns Hopkins he was a member of the Phi Chi medical fraternity and lived in the house at 606 North Broadway.

One of his life long cultural interests was music. He was a founder and a member of the board of directors of the Jacksonville Symphony Association. He also had a deep interest in the English composer, Frederick Delius, who lived near Jacksonville during the latter part of the nineteenth century.

Webster married Daphne Elise Davis of Jacksonville on February 22, 1947, at "Eln Boga," Ponte Vedra Beach, when he had reached the mature age of forty-one. He was a devoted family man and proud of his sons: John Webster Merritt Jr., now an architect, and Edward Ashton Merritt, a real estate broker. He was a founder communicant of Christ Church (Episcopal) in Ponte Vedra Beach, and in the church today is a lovely stained glass window depicting the Good Samaritan which was dedicated to his memory by friends in the parish.

His taste in dress was conservative: fine quality, light weight navy blue, or gray and white striped seersucker suits for summer, and for winter brown-gray mixed tweeds. He liked both bow ties and long ties but always in quiet colors. He was never enthusiastic about formal wear but to please his wife on occasion he would put on his black tie and tuxedo. He enjoyed small dinner parties and dancing. His social clubs were the Ponte Vedra Club and the Florida Yacht Club of Jacksonville.

About 1952 he noted bright red blood in his stool on several occasions and made a diagnosis of ulcerative colitis. His friend, Dr. James Borland Sr., a gastroenterol-

The Grammar School Student, 1917

In the Summer of 1947

Webster and Elise Merritt and Porgy, 1950

ogist, confirmed this diagnosis and for a time was able to control it with medical management. However, in January 1955, he was hospitalized at St. Luke's Hospital with paralytic ileus that would not respond to the Miller Abbott tube. Dr. Kenneth A. Morris explored his abdomen on January 15, 1955, and found massive distension of the small bowel. Dr. Morris performed an ileostomy and Webster made a good recovery and returned to practice.[28]

About thirteen months later profuse hemorrhage from the colon appeared and on March 2, 1956, a total colectomy was carried out by Dr. Morris at the Baptist Hospital. Because it was a difficult and prolonged operation, Dr. Morris decided not to remove the rectum lest his patient not survive the surgery. Convalescence was rapid but marred by an incisional hernia.

Almost five years passed then rectal bleeding again appeared and the remaining rectum was found to be ulcerated. He was again admitted to Baptist Hospital and Dr. Morris together with Dr. Brooks Brown performed an abdomino-perineal resection, repaired the incisional hernia and established a new ileostomy as the long standing one was not working satisfactorily. For a short while Webster was forced to wear two ileostomy bags then the original ileostomy was closed.

Again Web returned to practice but a ventral hernia appeared and on October 3, 1963, he was hospitalized at St. Luke's Hospital and emergency surgery performed by Dr. Morris for a strangulated hernia. Web's general condition was poor at this time and the following day he developed acute pulmonary edema which rapidly proved fatal.

The Summing Up: The world is a better place for Webster Merritt having lived not only because of the skillful and loving care he rendered his many patients and the love and support he gave his family, but also because of the legacy of Florida medical history he has bequeathed us.

Acknowledgements: The author is principally indebted to Mrs. Elise Merritt for the information in this sketch, but others such as Drs. Kenneth A. Morris, Mason Romaine, Thad Moseley and the staff of the Jacksonville Public Library have been of much assistance.

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• Dr. Straight, 550 Brickell Avenue, Miami 33131.

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# Cracker Cures

## SORE THROAT

**During the winter months and bad weather, wrap an old sock around your throat to keep from having a sore throat.**
**Put a wet rag around neck and a dry towel wrapped on top of wet rag.**
**Tie a black sock around neck.**
**Dirty stocking tied around neck for sore throat.**
**A cloth soaked in beef tallow saved from butchering wrapped around the throat.**

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Reprinted from "Cracker Cures," published by the Peace River Valley Historical Society. Dr. Gordon H. McSwain, of Arcadia, is custodian.

# U.S. Philately in Medicine

**Allen F. Brewer**

Dr. Joseph Warren, noted Boston physician and devoted patriot, mortally wounded died in the arms of a comrade at the battle of Bunker Hill on June 17, 1775. Contemporary artist, John Trumbull, memorialized the event in one of the most vivid and dramatic oil paintings in the annals of U.S. historic art. With Trumbull's equally famous portrayal of the signing of the Declaration of Independence, the picture hangs in the Yale University Art Gallery at New Haven, Conn. Interest of U.S. philately in American medicine was prompted by these two paintings.

Philatelic commemoration began with the regular issue of postage in 1869 when the centerpiece in design of the 24 cent stamp showed Trumbull's signing of the Declaration of Independence. Three physicians are identified, Drs. Josiah Bartlett, Benjamin Rush and Oliver Wolcott; five physicians were among the signers. A little more than 100 years later postal authorities designed the Bunker Hill stamp, issued June 17, 1975, around the Trumbull painting to commemorate the 200th anniversary of this battle. Justifiably the focal point of the stamp is the death of Dr. Warren.

Dr. Warren combined a knowledge of medicine with political devotion to the cause of the colonies. He was a member of the Provincial Congress in 1774-1775. History mentions him as successfully determining the objective of the British troops on the night of April 18, 1775, when he sent Paul Revere and William Dawes to spread the alarm to the countryside around Lexington and Concord. On June 14, 1775, he was commissioned a major general in the Colonial militia and three days later died on Bunker Hill.

Born in Roxbury, Mass., June 11, 1741, Dr. Warren was graduated from Harvard University in 1759 and thereafter studied medicine, subsequently acquiring an enviable professional reputation.

He was the first medical man of record to die in battle in the Revolutionary War. His death inspired the subsequent sacrifices of his colleagues in caring for the sick and wounded in those times which tried men's souls.

Dr. Bartlett's claim to philatelic mention is justified by his having been a signer of the Declaration and by the distinct honor of starting the voting with "aye" for New Hampshire when John Hancock called the roll of colonies from north to south on July 4, 1776. He practiced medicine in addition to a multitude of state legislative responsibilities and later served as judge of the State Supreme Court and as first governor of the state.

A founder of the New Hampshire State Medical Society, Dr. Bartlett is remembered medically for pioneering the use of cinchona, Peruvian Bark, in the treatment of what would be known today as malaria. His interest in medicine dated back to boyhood days when at age 16 he began studying under a Dr. Ordway of Amesbury where he was born in 1729. He obtained a license in 1750.

Dr. Rush, born near Philadelphia in 1745, was probably the first medico-philatelic personality to obtain a medical degree from that "dean" of medical schools of the era, University of Edinburgh, Scotland, graduating in 1768. He followed the profession, serving as Professor of Chemistry at the Philadelphia Medical College, predecessor of the University of Pennsylvania School of Medicine. In the military service he became a surgeon general in the Continental Army. Aside from being a signer of the Declaration of Independence, Dr. Rush is remembered as one of the promoters of the Philadelphia Dispensary, the first of its kind in the United States, and in association with the College of Physicians of Philadelphia. In the annals of golf he also is mentioned as having suggested this embryo British sport as beneficial to man's longevity.

Dr. Wolcott obtained a medical license some time after graduation from Yale University in 1747 and served as a major general in the French and Indian Wars. Following this period his interest in medicine could possibly have been aroused by his uncle, Dr. Alexander Wolcott, who acted as his preceptor. Even though he subsequently gained a license, Dr. Wolcott never practiced medicine. He went to the Continental

Congress where he bacame a signer of the Declaration of Independence from Connecticut, his native state. Politics was his principal interest and he served his state with distinction as governor until his death in 1797.

### Physician Signer of the Constitution

Dr. Hugh Williamson's relationship to commemorative philately stems from his being the only physician to sign the Constitution of the United States. He was a delegate from North Carolina. Born in Pennsylvania in 1735, in his early years, after a period of interest in the ministry and graduation from the College of Philadelphia in 1757, Dr. Williamson went to Europe and studied medicine. He received a degree from the University of Utrecht, Holland, in 1765. Returning to the colonies he settled in North Carolina where his medical practice flourished along with business interests. He was another member of the medical profession to become active in politics. His writings were instrumental in moulding early monetary policies. Before he died in 1819 he had been named an honorary Doctor of Medicine by the University of Leyden in Holland.

### Medical Participation in Colonization

Medical personnel were active in colonization. General John Forbes, a graduate of the University of Edinburgh, Scotland (circa 1733), made history as a military man in 1758 when he led the British-American Army to the relief of Fort Duquesne, now Pittsburgh. He never practiced medicine, preferring a military career, but had a part in U.S. philatelic commemoration in 1958. Ailing, he is shown on a litter in the design of the Fort Duquesne commemorative stamp.

Colonial expansion caused another physician-legislator to be featured on a commemorative stamp, notably Dr. Manassah Cutler of Connecticut who sponsored the Northwest Ordinance Act of 1787 which led to colonization of the Northwest Territory. A graduate of Yale University in 1767, he studied medicine under Dr. E. Whitney. Dr. Cutler's likeness appears on the sesquicentennial stamp of 1937 commemorating the Act. He also is shown as one of the three man group on the Northwest Territory 150th Anniversary stamp of 1938.

Dr. John Mcloughlin, Canadian-born in 1784, who also was a graduate of the University of Edinburgh (circa 1803), promoted organization of the Oregon Territory which included present day Idaho, Oregon and Washington and portions of Wyoming and Montana. The centennial stamp was issued in 1936.

### Age of Postal Commemoration

While the 24 cent regular stamp of 1869 has been mentioned as a commemorative, it is questionable whether postal authorities at the time regarded it as such. True commemoration began with the Columbian Series in 1893; later, historical events and revolutionary personalities were honored on appropriate anniversaries. Medicine and related subjects did not come into the picture until the Red Cross 50th Anniversary stamp of 1931, Ordinance and Northwest Territory stamps of 1937-38, and the Famous American Series of 1940. In this latter series Dr. Crawford W. Long and Dr. Walter Reed were included. Subsequently, Drs. Ephraim McDowell, Charles and William Mayo, Elizabeth Blackwell and George Papanicolaou have been honored.

Dr. Long, born in Georgia in 1815, studied medicine at the University of Pennsylvania graduating in 1839. As discoverer of sulfuric ether anesthesia in the early 1840's he advanced surgery by enabling relief of pain and permitting less hurried and more meticulous operating room procedures. Formerly, laudanum, a shot of whiskey or rum, and a bullet to bite on had been the only means of quieting a patient. There had been other claimants to discovery of sulfuric ether anesthesia but the U.S. postal authorities justifiably honored Dr. Long when the 100th anniversary commemorative stamp was issued in 1940.

Dr. McDowell, Virginia-born in 1771, studied medicine with Dr. Alexander Humphrey of Staunton. Later he went to Edinburgh but did not receive a degree until 1825 when the honorary Doctor of Medicine was conferred upon him by the University of Maryland. Dr. McDowell merited the status as Famous American in surgery by his operation to remove an ovarian tumor from Jane Crawford in Danville, Kentucky, in December 1809. He was the first practitioner to successfully perform such an operation. The Dr. Ephraim McDowell Famous American stamp in 1959 commemorated the 150th anniversary of this operation.

Dr. Walter Reed, an Army surgeon with the rank of major, earned his place as a Famous American in the series of commemorative stamps of 1940 by intensively and persistently studying the cause of yellow fever in the United States and Cuba. Shortly after the Spanish-American War in the early 1900's, he identified the species of mosquito that carried the yellow fever germ but, ironically, died shortly thereafter from appendicitis. Dr. Reed was born in Virginia in 1851 and studied medicine at Bellevue Medical College in New York graduating at age 19.

Dr. William J. Mayo and Dr. Charles H. Mayo were honored by a commemorative stamp in 1964 for their

# MEDICINE and STAMPS

RICAN DENTAL ASSOCIATION 1859-1959
ental Health
4c
ITED STATES POSTAGE

1836 OREGON TERRITORY 1936
WASHINGTON
MONTANA
MISSOULA
WALLA WALLA
IDAHO
OREGON
3
U.S. POSTAGE
THREE CENTS
3

ELIZABETH BLACKWELL · FIRST WOMAN PHYSICIAN
US POSTAGE 18c

er Hill 1775 by Trumbull
Bicentennial IOc

UNITED STATES POSTAGE
FOUNDER OF THE
3¢
AMERICAN RED CROSS
CLARA BARTON

FORT DUQUESNE
1758
1958
U.S. POSTAGE
4c

1863 INTERNATIONAL RED CROSS 1963
5c
UNITED STATES POSTAGE

USA
13c
ARA MAASS
She gave her life

U.S. POSTAGE 5c
DOCTORS
MAYO

POSTAGE
3
CENTS
CUTLER
PUTNAM
ORDINANCE OF 1787

HARMACY
8c
ITED STATES POSTAGE

UNITED
STATES
POSTAGE
5¢

contributions to medical education and research. This has been the only doctor stamp printed in green, symbolic color of medicine.

Sons of a famous physician, Dr. William was born in LeSueur, Minnesota in 1861. He was graduated from the University of Michigan in 1883 then trained in surgery under the guidance of his father, an advocate of the Listerian theory of antisepsis. His younger brother, Charles, was graduated from the Chicago Medical College in 1888. He too became famous in surgery and research procedures.

In 1974 the Postal Service paid tribute to the emancipation of women when it issued the Dr. Elizabeth Blackwell stamp. She was the first woman to obtain a degree from a medical school in the United States. She pioneered the cause of women in medicine by founding the New York Infirmary for Women and Children shortly after graduating at the head of her class from Geneva College of Medicine in 1849. This infirmary was designed to provide clinical opportunities for female medical students and physicians and a nursing school.

Dr. Papanicolaou's claim to a place in medical history is based upon the Pap test which resulted from studies of cervical cancer in women. U.S. philately honored him in 1978 with a stamp showing his likeness along with his microscope.

*Authors Note: This has been a fascinating field for philatelic research. If weaving in personalized data where available to enhance reader interest has been successful, it is hoped that it balances the necessity for factual details. If there are oversights or questionable details, it is hoped that they are not too serious.*

● Mr. Brewer, 13529 South Indian River Drive, Jensen Beach 33457.

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# Cracker Cures

## TOOTHACHE

**Moisten forefinger with gin and apply to gums surrounding tooth causing the trouble.**
**Apply a strong tea made of cotton seed to the tooth every half hour for ten hours.**
**Find a pine that has been struck by lightening, cut a toothpick from it and pick your teeth. This will cure the toothache.**
**Hang an egg (one for each child) over door and baby will teethe without any trouble.**
**To always be free of toothache carry a hog's tooth in your right-hand pants pocket.**
**Make a necklace of rattlesnake bones for teething babies.**
**Nine pearl buttons on a string as a necklace makes baby teethe easily.**
**Necklace made from small pieces of Jerusalem oak and worn around the neck.**

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# V-Cillin K®

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is the most widely prescribed brand of oral penicillin

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125 and 250 mg*/5 ml

**V-Cillin K®**
**penicillin V potassium**

**Description:** V-Cillin K is the potassium salt of penicillin V. This chemically improved form combines acid stability with immediate solubility and rapid absorption.

**Indications:** For the treatment of mild to moderately severe pneumococcal respiratory tract infections and mild staphylococcal skin and soft-tissue infections that are sensitive to penicillin G. See the package literature for other indications.

**Contraindication:** Previous hypersensitivity to penicillin.

**Warnings:** Serious, occasionally fatal, anaphylactoid reactions have been reported. Some patients with penicillin hypersensitivity have had severe reactions to a cephalosporin; inquire about penicillin, cephalosporin, or other allergies before treatment. If an allergic reaction occurs, discontinue the drug and treat with the usual agents (e.g., epinephrine or other pressor amines, antihistamines, or corticosteroids).

**Precautions:** Use with caution in individuals with histories of significant allergies and/or asthma. Do not rely on oral administration in patients with severe illness, nausea, vomiting, gastric dilatation, cardiospasm, or intestinal hypermotility. Occasional patients will not absorb therapeutic amounts given orally. In streptococcal infections, treat until the organism is eliminated (minimum of ten days). With prolonged use, nonsusceptible organisms, including fungi, may overgrow; treat superinfection appropriately.

**Adverse Reactions:** Hypersensitivity, including fatal anaphylaxis. Nausea, vomiting, epigastric distress, diarrhea, and black, hairy tongue. Skin eruptions, urticaria, reactions resembling serum sickness (including chills, edema, arthralgia, prostration), laryngeal edema, fever, and eosinophilia. Infrequent hemolytic anemia, leukopenia, thrombocytopenia, neuropathy, and nephropathy, usually with high doses of parenteral penicillin. (102175)

***Equivalent to penicillin V.**

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The tranquilizer component alleviates symptoms of anxiety and agitation within a few days, without apparent dulling of mental acuity. Hypnotic effects from the tranquilizer component appear to be minimal, particularly in patients permitted to remain active. However, TRIAVIL may impair mental and/or physical abilities required for the performance of hazardous tasks.

**Highly effective antidepressant action**

The antidepressant component relieves symptoms of depression such as poor concentration and feelings of hopelessness as well as early morning awakening; adequate relief of symptoms may take a few weeks or even longer.

**Increased activity potential often results from symptomatic relief**

As the symptoms of anxiety and depression respond to TRIAVIL, many patients may show renewed interest in family and recreational activities and are able to function more effectively at work.

**More prescribing convenience**

For optimal flexibility there are now *five* tablet strengths of TRIAVIL for ease of dosage adjustment. For initial management of patients with moderate anxiety and depression, one TRIAVIL® 2-25, containing 2 mg perphenazine and 25 mg amitriptyline HCl, t.i.d. may often be adequate. TRIAVIL® 4-50, containing 4 mg perphenazine and 50 mg amitriptyline HCl, provides b.i.d. convenience for those patients needing the larger total daily dose of 8 mg perphenazine and 100 mg amitriptyline HCl as initial or maintenance therapy.

**Treatment with TRIAVIL—a balanced view:**

TRIAVIL is contraindicated in CNS depression from drugs, in the presence of evidence of bone marrow depression, and in patients hypersensitive to phenothiazines or amitriptyline. It should not be used during the acute recovery phase following myocardial infarction or in patients who have received an MAOI within two weeks. Patients with cardiovascular disorders should be watched closely. Not recommended in children or during pregnancy. TRIAVIL may impair mental and/or physical abilities required for performance of hazardous tasks and may enhance the response to alcohol. Antiemetic effect may obscure toxicity due to overdosage of other drugs or mask other disorders. The possibility of suicide in depressed patients remains until significant remission occurs. Such patients should not have access to large quantities of the drug. Hospitalize as soon as possible any patient suspected of having taken an overdose.

For moderate anxiety with depression

dual-action Triavil®

containing perphenazine and amitriptyline HCl

MSD
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*Please see following page for a brief summary of prescribing information.*

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## More dosage strengths than any other formulation containing a tranquilizer and an antidepressant

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## containing perphenazine and amitriptyline HCl

**Available:**
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TRIAVIL® 2-10: Each tablet contains
2 mg perphenazine and 10 mg amitriptyline HCl.
TRIAVIL® 4-50: Each tablet contains
4 mg perphenazine and 50 mg amitriptyline HCl.
TRIAVIL® 4-25: Each tablet contains
4 mg perphenazine and 25 mg amitriptyline HCl.
TRIAVIL® 4-10: Each tablet contains
4 mg perphenazine and 10 mg amitriptyline HCl.

**CONTRAINDICATIONS:** Central nervous system depression from drugs (barbiturates, alcohol, narcotics, analgesics, antihistamines); evidence of bone marrow depression; known hypersensitivity to phenothiazines or amitriptyline. Should not be given concomitantly with a monoamine oxidase inhibitor since hyperpyretic crises, severe convulsions, and deaths have occurred from such combinations. When used to replace a monoamine oxidase inhibitor, allow a minimum of 14 days to elapse before initiating therapy with TRIAVIL. Therapy should then be initiated cautiously with gradual increase in dosage until optimum response is achieved. Not recommended for use during acute recovery phase following myocardial infarction.

**WARNINGS:** TRIAVIL should not be given concomitantly with guanethidine or similarly acting compounds since TRIAVIL may block the antihypertensive action of such compounds. Use cautiously in patients with history of urinary retention, angle-closure glaucoma, increased intraocular pressure, or convulsive disorders. Dosage of anticonvulsive agents may have to be increased. In patients with angle-closure glaucoma, even average doses may precipitate an attack. Patients with cardiovascular disorders should be watched closely. Tricyclic antidepressants, including amitriptyline HCl, have been reported to produce arrhythmias, sinus tachycardia, and prolongation of conduction time, particularly in high doses. Myocardial infarction and stroke have been reported with tricyclic antidepressant drugs. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. May impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle. In patients who use alcohol excessively, potentiation may increase the danger inherent in any suicide attempt or overdosage. Not recommended in children or during pregnancy.

**PRECAUTIONS:** Suicide is a possibility in depressed patients and may remain until significant remission occurs. Such patients should not have access to large quantities of this drug.

**Perphenazine:** Should not be used indiscriminately. Use with caution in patients who have previously exhibited severe adverse reactions to other phenothiazines. Likelihood of some untoward actions is greater with high doses. Closely supervise with any dosage. The antiemetic effect of perphenazine may obscure signs of toxicity due to overdosage of other drugs or make more difficult the diagnosis of disorders such as brain tumor or intestinal obstruction. A significant, not otherwise explained, rise in body temperature may suggest individual intolerance to perphenazine, in which case discontinue.

If hypotension develops, epinephrine should not be employed, as its action is blocked and partially reversed by perphenazine. Phenothiazines may potentiate the action of central nervous system depressants (opiates, analgesics, antihistamines, barbiturates, alcohol) and atropine. In concurrent therapy with any of these, TRIAVIL should be given in reduced dosage. May also potentiate the action of heat and phosphorous insecticides. There is sufficient experimental evidence to conclude that chronic administration of antipsychotic drugs which increase prolactin secretion has the potential to induce mammary neoplasms in rodents under the appropriate conditions. There are recognized differences in the physiological role of prolactin between rodents and humans. Since there are, at present, no adequate epidemiological studies, the relevance to human mammary cancer risk from prolonged exposure to perphenazine and other antipsychotic drugs is not known.

**Amitriptyline:** In manic-depressive psychosis, depressed patients may experience a shift toward the manic phase if they are treated with an antidepressant. Patients with paranoid symptomatology may have an exaggeration of such symptoms. The tranquilizing effect of TRIAVIL seems to reduce the likelihood of this effect. When amitriptyline HCl is given with anticholinergic agents or sympathomimetic drugs, including epinephrine combined with local anesthetics, close supervision and careful adjustment of dosages are required. Paralytic ileus may occur in patients taking tricyclic antidepressants in combination with anticholinergic-type drugs.

Caution is advised if patients receive large doses of ethchlorvynol concurrently. Transient delirium has been reported in patients who were treated with 1 g of ethchlorvynol and 75-150 mg of amitriptyline HCl.

Amitriptyline HCl may enhance the response to alcohol and the effects of barbiturates and other CNS depressants.

Concurrent administration of amitriptyline HCl and electroshock therapy may increase the hazards associated with such therapy. Such treatment should be limited to patients for whom it is essential. Discontinue several days before elective surgery if possible. Elevation and lowering of blood sugar levels have both been reported. Use with caution in patients with impaired liver function.

**ADVERSE REACTIONS:** Similar to those reported with either constituent alone.
**Perphenazine:** Extrapyramidal symptoms (opisthotonus, oculogyric crisis, hyperreflexia, dystonia, akathisia, acute dyskinesia, ataxia, parkinsonism) have been reported and can usually be controlled by the concomitant use of effective antiparkinsonian drugs and/or by reduction in dosage, but sometimes persist after discontinuation of the phenothiazine.

Tardive dyskinesia may appear in some patients on long-term therapy or may occur after drug therapy with phenothiazines and related agents has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. Symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth, or jaw. Involuntary movements of the extremities sometimes occur. There is no known treatment for tardive dyskinesia; antiparkinsonism agents usually do not alleviate the symptoms. It is advised that all antipsychotic agents be discontinued if the above symptoms appear. If treatment is reinstituted, or dosage of the particular drug increased, or another drug substituted, the syndrome may be masked. Fine vermicular movements of the tongue may be an early sign of the syndrome. The full-blown syndrome may not develop if medication is stopped when lingual vermiculation appears.

Other side effects are skin disorders (photosensitivity, itching, erythema, urticaria, eczema, up to exfoliative dermatitis); other allergic reactions (asthma, laryngeal edema, angioneurotic edema, anaphylactoid reactions); peripheral edema; reversed epinephrine effect; hyperglycemia; endocrine disturbances (lactation, galactorrhea, gynecomastia, disturbances of menstrual cycle); altered cerebrospinal fluid proteins; paradoxical excitement; hypertension, hypotension, tachycardia, and ECG abnormalities (quinidine-like effect); reactivation of psychotic processes; catatonic-like states; autonomic reactions, such as dry mouth or salivation, headache, anorexia, nausea, vomiting, constipation, obstipation, urinary frequency or incontinence, blurred vision, nasal congestion, and a change in pulse rate; other adverse reactions reported with various phenothiazine compounds, but not with perphenazine, include grand mal convulsions, cerebral edema, polyphagia, pigmentary retinopathy, photophobia, skin pigmentation, and failure of ejaculation.

The phenothiazine compounds have produced blood dyscrasias (pancytopenia, thrombocytopenic purpura, leukopenia, agranulocytosis, eosinophilia); and liver damage (jaundice, biliary stasis).

Pigmentation of the cornea and lens has been reported to occur after long-term administration of some phenothiazines. Although it has not been reported in patients receiving TRIAVIL, the possibility that it might occur should be considered.

Hypnotic effects, lassitude, muscle weakness, and mild insomnia have also been reported.

**Amitriptyline:** Note: Listing includes a few reactions not reported for this drug, but which have occurred with other pharmacologically similar tricyclic antidepressant drugs and must be considered when amitriptyline is administered. *Cardiovascular:* Hypotension; hypertension; tachycardia; palpitation; myocardial infarction; arrhythmias; heart block; stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus; syndrome of inappropriate ADH (antidiuretic hormone) secretion. *Anticholinergic:* Dry mouth; blurred vision; disturbance of accommodation; increased intraocular pressure; constipation; paralytic ileus; urinary retention; dilatation of urinary tract. *Allergic:* Skin rash; urticaria; photosensitization; edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis; leukopenia; eosinophilia, purpura; thrombocytopenia. *Gastrointestinal:* Nausea; epigastric distress; vomiting; anorexia; stomatitis; peculiar taste; diarrhea; parotid swelling; black tongue. Rarely hepatitis (including altered liver function and jaundice). *Endocrine:* Testicular swelling and gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido; elevated or lowered blood sugar levels. *Other:* Dizziness, weakness; fatigue; headache; weight gain or loss; increased perspiration; urinary frequency; mydriasis; drowsiness; alopecia. *Withdrawal Symptoms:* Abrupt cessation after prolonged administration may produce nausea, headache, and malaise. These are not indicative of addiction.

**OVERDOSAGE:** All patients suspected of having taken an overdosage should be admitted to a hospital as soon as possible. Treatment is symptomatic and supportive. However, the intravenous administration of 1–3 mg of physostigmine salicylate is reported to reverse the symptoms of tricyclic antidepressant poisoning. Because physostigmine is rapidly metabolized, the dosage of physostigmine should be repeated as required particularly if life-threatening signs such as arrhythmias, convulsions, and deep coma recur or persist after the initial dosage of physostigmine. On this basis, in severe overdosage with perphenazine-amitriptyline combinations, symptomatic treatment of central anticholinergic effects with physostigmine salicylate should be considered.

J8TR31 (DC6613215)

*For more detailed information, consult your MSD Representative or see full Prescribing Information. Merck Sharp & Dohme, Division of Merck & Co., INC., West Point, Pa. 19486.*

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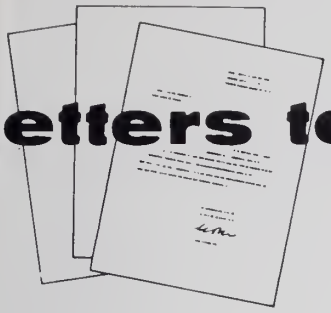

# Letters to the Editors

## THE USA VS. THE FMA

**To the Editor:** The Editor and I were incisively engaged by the article on page 553 of your May 1979 issue, "*Our Federal Government vs. The Florida Medical Association, Inc.,*" by Dr. Parham and Mr. Thrasher.

May we have your gracious permission to reprint it, one of these months when I have an appropriate space for it? It would be duly credited to your *Journal,* of course, and prefaced by the remarks that it describes not only what can but is happening to this society in Virginia.

*Ann Gray*
*Managing Editor*
*Virginia Medical*
*Richmond, Va.*

*(Editor's Note: Permission Granted.)*

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## NUTRITION ISSUE

**To the Editor:** I've recently returned from a two-day workshop at the NIH on Nutrition Education for the Physician. While I was there, I received numerous comments from people who had seen the recent FMA issue on Nutrition. All that I heard about the issue was extremely positive. As a matter of fact, I had over a dozen requests for that issue from the participants in the workshop.

Again, it is through your tireless efforts that the quality of the JFMA has risen so remarkably in the past few years. I was pleased to have been able to participate in that recent issue on Nutrition.

*James J. Cerda, M.D.*
*Gainesville*

## NUTRITION ISSUE

**To the Editor:** The Nutrition Foundation has a deep interest in furthering education in nutrition in medical schools and in continuing medical education programs for physicians and health personnel. At the invitation of the editors of your Special Issue on Nutrition, (April 1979), I contributed an article on food additives. Accordingly, I received a copy of this excellent publication.

First, I think you and the Florida Medical Association and *Journal* are to be congratulated upon the leadership you have exhibited in bringing out this extensive special issue of your state journal on nutrition. The variety of subjects covered and the selection of authors provide your physician readers with good, sensible, basic and applied information on subjects that ofttimes are not critically presented.

We in The Nutrition Foundation repeatedly are asked to advise on curricula for undergraduate nutrition teaching, as well as for continuing education courses. It would be a real service if it were possible for us to have a supply of copies of the April 1979 *Journal of the Florida Medical Association* special issue on nutrition to distribute in a selective manner to committees or individuals in some of the medical schools or medical centers active in developing such programs. In addition, it would be very helpful if I could make copies of this journal available to the interested Trustees and supporters of The Nutrition Foundation, among whom are presidents of other foundations concerned with health and education, and deans and presidents of a number of leading universities.

*William J. Darby, M.D., Ph.D.*
*President, The Nutrition Foundation*
*New York City*

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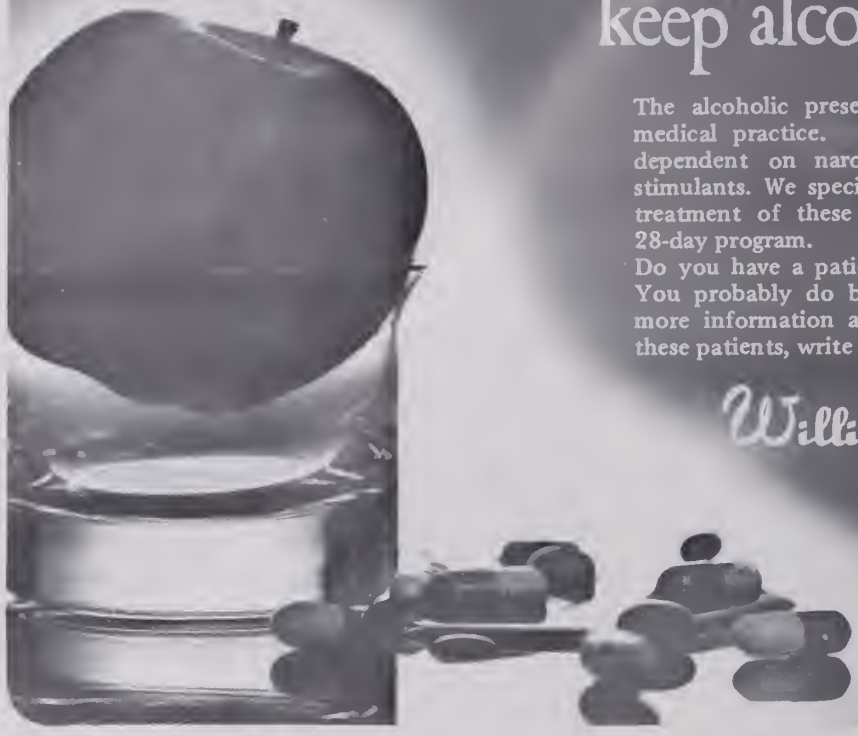
**Study the past if you would divine the future.**

**— Confucius**



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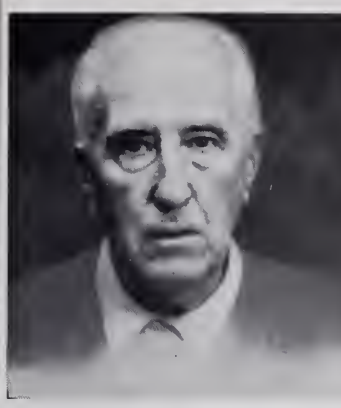

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DOSAGE: Two tablets after each meal.
SIDE EFFECTS: Occasionally flushing and pruritus associated with niacin administration.
PRECAUTIONS: Use with caution in patients with low convulsive threshold, focal brain lesions, severely impaired liver function, peptic ulcer, diabetes, and gall bladder or liver diseases. Niacin may potentiate hypotensive drugs, phenothiazine derivatives and inactivate fibrinolysin.
CONTRAINDICATIONS: There are no known contraindications to Menic.

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## Octubre 15-19, 1979
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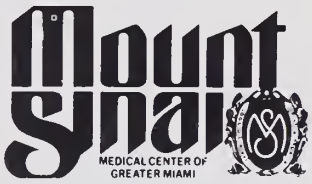


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**Octubre 15-19, 1979**
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# Medical News Around the State

Dr. Van Dyke

**Jerrold A. Van Dyke, M.D.** . . . a member of the editorial staff of *The Journal* for the past two years, was the top student in his graduating class at the University of Florida College of Medicine this spring. The College conferred 121 M.D. degrees at commencement exercises in Gainesville on May 26.

He received the Upjohn Achievement Award for the highest academic standing throughout four years of medical school.

In 1977-78, Dr. Van Dyke was a student consulting editor of *The Journal,* moving up to the position of Assistant Editor last year.

Dr. Van Dyke enters an obstetrics and gynecology residency program in St. Louis this summer.

Dr. Walker

**James W. Walker, M.D., of Jacksonville** . . . has been elected President of the Physicians' Insurance Association of America. The Association is composed of 21 medical society sponsored companies in 19 states which make medical malpractice insurance available to more than 84,000 physicians.

Dr. Walker is President of the Professional Insurance Management Company (PIMCO), which was organized by the Florida Medical Association four years ago in the midst of the liability insurance crisis. He formerly served as FMA Secretary and Treasurer for several years.

Dr. Green

**J. Russell Green Jr., M.D., of Gainesville** . . . has been elected President of the American Heart Association's Florida Affiliate. A Heart Association volunteer for 16 years, Dr. Green is Professor of Community Health and Family Medicine at the University of Florida College of Medicine.

Dr. Green's election came at the Association's 30th Annual Meeting at Lake Buena Vista.

Dr. Schiebler

In another convention highlight, the Association presented the Distinguished Service Medallion, its highest award, to **Gerold L. Schiebler, M.D.,** Professor and Chairman of the Department of Pediatrics at the University of Florida, and Editor of *The Journal of the Florida Medical Association.*

Dr. Schiebler was cited for "working tirelessly for the eradication of heart disease, especially in children and even in the newborn" and for his outstanding performance in every assignment undertaken for the Heart Association, which he served as President in 1973.

**Philip P. Gassman, M.D., of Miami** . . . has been elected President of the Greater Miami Radiological Society.

Other new officers elected in May include: John J. Pittari, M.D., Fort Lauderdale, Vice President; Neil H. Messinger, M.D., Miami, Secretary; and Edward Russell, M.D., Miami, Treasurer.

**Alfred S. Ketchum, M.D., of Miami** . . . has been elected President of the American Radium Society. Dr. Ketchum is Professor and Chief of the Department of Surgical Oncology, University of Miami School of Medicine.

**Daniel H. Mintz, M.D.** . . . has been named interim Chairman of the Department of Medicine at the University of Miami School of Medicine. Dr. Mintz, who joined the School in 1969 as Professor of Medicine, is internationally known for his research in diabetes mellitus.

A native of New York, Dr. Mintz received his medical degree from New York Medical College in 1956. He is the author or co-author of more than 100 scientific works.

**D. Ralph Millard Jr., M.D.** . . . was named a trustee of the American Association of Plastic Surgeons at the organization's meeting in Palm Beach, April 29 to May 2.

Dr. Millard, Chief of the Division of Plastic Surgery at the University of Miami School of Medicine, is a former Vice Chairman of the American Board of Plastic Surgery.

**An endowed faculty position in geriatrics** . . . is being established at the University of Florida College of Medicine with a gift of undisclosed amount from Ruth Schwarz Jewett, M.D., of Winter Park.

In keeping with Dr. Jewett's wishes, a medical scientist with extensive background and commitment to the medical problems of the aged will be appointed "Ruth S. Jewett Professor of Geriatrics," according to William B. Deal, M.D., Vice President for Health Affairs and Dean of the College.

The salary support will enable the professor, yet to be chosen, to develop programs of education, patient care and research in the area of geriatrics.

Dr. Jewett's husband, Eugene L. Jewett, M.D., three years ago endowed a faculty chair of orthopedics at Florida.

**Andrew Woods, M.D., of Dothan, Ala** . . . has been named the first recipient of the F. Eugene Tubbs, M.D., J.D., Memorial Award. The prize is named in memory of Dr. Tubbs, a former member of the Florida Legislature who along with his wife was killed in an airplane crash one year ago.

Dr. Woods, a member of the University of Florida College of Medicine's 1979 graduating class, was selected for outstanding scholarship and leadership and concern towards improving health of his fellow citizens. He is remaining at the University of Florida for pediatric training.

Dr. Modell

**Jerome H. Modell, M.D., of Gaineville** . . . has been named President-elect of the Association of University Anesthetists.

Dr. Modell is Professor and Chairman of the Department of Anesthesiology at the University of Florida College of Medicine. His election came at the AUA's annual meeting at Chapel Hill, N.C.

Next year, Dr. Modell will begin a two-year term as President of the organization, which was founded in 1953 for the promotion of research and teaching in anesthesia.

Dr. Skinner

**Richard G. Skinner Jr., M.D., . . . of Jacksonville,** has been honored for 27 years of service to the State's program of children's medical services.

Dr. Skinner received the Department of Health and Rehabilitative Services Merit Award for his efforts. He became involved with the program in 1952, when it was named the Florida Crippled Children's Commission and remains involved to this day with the Florida Division of Children's Medical Services.

The Jacksonville pediatrician was cited particularly for his efforts that led to establishment of the Child Abuse Crisis Project of HRS, District IV.

He serves the agency as parttime district program supervisor and medical director.

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Please Pre-register as early as possible; enrollment is limited.

FEES: $125.00 including luncheon on Saturday, September 22, 1979. ($10.00 extra for spouse or guest at luncheon)

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**Contraindications:** Topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use in pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, or in large amounts, or for prolonged periods of time.

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**Caution:** Federal law prohibits dispensing without prescription. For external use only. Store in a cool place but do not freeze.

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# Book Reviews

**Book Review Editor**

**F. Norman Vickers, M.D.**

**Atlas of Dermatology** by Gernot Rassner, M.D., Ulm. Assisted by Monika Knickenberg, M.D., Ulm. Translated and edited by Guinter Kahn, M.D. 200 Pages. Price $24. Urban and Schwarzenberg, Baltimore-Munich, 1978.

The author states in his forward that this atlas is to be followed by a textbook so this review is made with some reservation since the entire combination is not available for review. The atlas is intended to give only a brief introduction to dermatology.

The first section of the atlas covers the basics of dermatology and presents a brief overview of pertinent anatomy and histology. It also contains black and white illustrated definitions of terms used in describing skin lesions. The rest of the text is devoted to various dermatologic diseases which are classified by anatomic and histologic location. Each particular subsection is further subdivided according to possible etiology such as viral, congenital, allergic and so on.

The superb organization and its systemmatic approach to dermatology qualify this atlas as an excellent text for the introduction of dermatology to medical students and residents. The 201 color photographs are of superb quality and reasonably large size.

The major weakness of the atlas is the use of relatively few or even a single photograph to represent a skin disease that may present itself in numerous forms. The photographs also tend to be extreme samples of the particular diseases.

The emphasis on understanding dermatologic principles make this an ideal introductory dermatology text but the lack of depth makes this book of little value to the average practitioner in need of information that will aid in the patient management.

It will be interesting to see how the forthcoming textbook will compliment this atlas.

Jerrold A. Van Dyke, M.D.
St. Louis, Mo.

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Dr. Van Dyke, formerly an Assistant Editor of *The Journal*, presently a resident in Obstetrics and Gynecology, Barnes Hospital, St. Louis, Mo.

**Crohn's Disease**, by Bryan N. Brooke, M.D., David R. Cave, Ph.D., John .F Curry and Denis W. King. 1977. 113 pages. Price $21.00. MacMillan Press, Ltd. Distributed by Oxford University Press, New York.

**Gastrointestinal Pathophysiology**, Second Edition. Edited by Frank P. Brooks, M.D., 1978. 435 pages. Price $8.95. Oxford University Press, New York (Paperback).

**Manual of Clinical Problems in Internal Medicine.** Annotated with Key References by Jerry L. Spivak, M.D. and H. Verdain Barnes, M.D. 1978. 513 pages. Price $10.95. Little, Brown and Company, Boston, Massachusetts (Second Edition).

The thin volume, **Crohn's Disease** by Bryan Brooke and colleagues, is beautifully printed with color plates illustrating skin and mouth manifestations of the disease. Black and white illustrations of x-rays and photomicrographs are ample. References and indexing are adequate.

Bryan Brooke is emeritus professor of surgery at St. George's Hospital in London. The book is written from a broad perspective of Brooke's long experience in the field. Although no new material is presented here, this is an elegant summary of our knowledge to date.

**Gastrointestinal Pathophysiology** shares at once the strengths and weaknesses of books of this type. Dr. Frank Brooks, in his introduction, indicated that this volume was an outgrowth of the teaching experience at the University of Pennsylvania. It presents, in summary form, the common and important GI disorders. References are current and adequate. An index is present. Sixty pages are devoted to common symptoms. The book will be of primary interest to medical students, house officers, allied medical personnel and physicians wishing a brief but adequate overview of GI pathophysiology.

Spivak and Barnes' **Manual of Clinical Problems in Internal Medicine** was an outgrowth of the house staff training program at Johns Hopkins Hospital. It is wire-bound for hard service on the wards. Interestingly, all the summaries are written by either Dr. Spivak or Barnes. References are current and are more numerous than in the standard texts. For example, there are two pages of text material on Addison's Disease with 32 references. Most references are annotated with one sentence indicating the significance of that particular article. Again, this volume will be of primary interest to medical students, house officers and allied medical personnel.

I will find it useful as a quick guide to medical literature.

F.N.V.

# Books Received

**Receipt of the following books is acknowledged. Medical readers interested in reviewing particular books are invited to address requests to the Book Review Editor. Following acceptance of a written review for publication, a reviewer may then retain the book reviewed for his personal or favorite library.**

**The Chemistry of Human Behavior** by Herbert L. Meltzer, Ph.D. 261 Pages. Illustrated. Price $17.95 (cloth). Nelson-Hall Publishers, Chicago, 1979.

**Cry Babel, The Nightmare of Aphasia and a Courageous Woman's Struggle to Rebuild Her Life** by April O. Armstrong. 252 Pages. Price $8.95. Doubleday & Company, New York, 1979.

**Annual Review of Neuroscience** with 31 contributing authors. 555 Pages. Annual Reviews, Inc., Palo Alto, California, 1979.

**Norethindrone, The First Three Decades** edited by Mary Jean Pramik. 100 Pages. Syntex Laboratories, Palo Alto, California, 1978.

**Botanical Dermatology** by John Mitchell, M.D. and Arthur Rook, M.D. 787 Pages. Price $39.50. Lea & Febiger, Philadelphia, Penn., 1979.

**Humanhood: Essays in Biomedical Ethics** by Joseph Fletcher. 204 Pages. Price $14.95 (cloth) $6.95 (paper). Prometheus Books, Buffalo, New York, 1979.

**Family Health in an Era of Stress** conducted by Yankelovich, Skelly and White, Inc. 192 Pages (plus packet). General Mills, Inc., Minneapolis, Minnesota, 1979.

**Correlative Neuroanatomy & Functional Neurology, 17th Edition,** by Joseph G. Chusid, M.D. 464 Pages. Illustrated. Price $12.00. Lange Medical Publications, Los Altos, California, 1979.

**The Heritage of Aviation Medicine, An Annotated Directory of Early Artifacts,** by Robert J. Benford, M.D. 122 Pages. Illustrated. Price $4.50. Aerospace Medical Association, Washington, D.C. 1979.

**Women Can Wait, The Pleasures of Motherhood After Thirty** by Terri Schultz. 191 Pages. Price $4.95. Doubleday & Company, New York, 1979.

**Clear Skin, A Step-by-Step Program to Stop Pimples, Blackheads, Acne** by Kenneth L. Flandermeyer, M.D. 211 Pages. Illustrated. Price $8.95. Little, Brown & Company, Canada, 1979.

**Instructions for Parents** by Matthew M. Cohen, M.D. 232 Pages. Price $22.50. Appleton-Century-Crofts, New York, 1979.


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Reference:
King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

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# FMA AUXILIARY

## Gathering Auxiliary Pearls

We are most fortunate that we can become involved in Auxiliary projects that not only medically aid our communities but can advance our own knowledge and, at the same time, help improve the image of organized medicine. We must take advantage of all the political and medical education available to us.

Try to get to know your legislators; meet with them informally this summer and attend public meetings where their total delegation is appearing. Arm yourselves with the correct information so that you can speak intelligently on issues of concern.

Because we are concerned with gasoline shortages, we will be deleting the Leadership Session this year. Instead, we will expand the Fall Conference, the March Workshops and the Annual Meeting next May. It is of the utmost importance that you PLAN NOW to attend these meetings.

I hope you have been making items for the "International Health Bazaar", held at time of the Fall Conference, Ponte Vedra Beach Club Hotel, Ponte Vedra on September 11-13. Funds raised will be donated to SKIP, MAP, and Interplast South.

The Auxiliary, in cooperation with the Florida Medical Association, has printed a brochure on Child Abuse which has been distributed to all practicing physicians in the State of Florida and will be distributed to all schools and other children's facilities in our State.

Our Day in the Legislature has become so popular that we are increasing this session an additional day. If we become more familiar with our legislators, we will be more effective during this visit.

We will be discussing all these topics and more at the Fall Conference, so come along and pick up a few pearls. COMMUNICATION, EDUCATION, MOTIVATION . . . these pearls of wisdom need you!

Mrs. B. D. Epstein (Edie)
President FMA Auxiliary

*NOTE: All information concerning the Fall Conference and hotel reservations are contained in the August issue of the "BEEPER."*

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# Others Are Saying

## Bennett's Congressional Questionnaire Results

Mr. Speaker, I have just compiled the results of my 1979 Congressional Questionnaire and I would like to share the results with my colleagues here in the House. I received more than 10,500 responses to the questionnaire which was mailed to every household in the Third Congressional District of Florida.

Of particular note, 69 percent of the respondents were opposed to compulsory national health insurance and only 31 percent were in favor. In 1975, when I asked an identical question about national health insurance, 57 percent were opposed with 43 percent in favor. In just four years, support for compulsory national health insurance has fallen 12 percentage points in my Congressional district.

On other questions, large majorities favored increased spending for national defense, a requirement that able bodied welfare recipients work for their benefits, and a postponement of scheduled increases in the minimum wage. In addition, a large majority opposed allowing common situs picketing.

Here is a detailed breakdown of the questions and responses:

Do you favor:

| | | Yes | No |
|---|---|---|---|
| (1) | Increased spending for national defense? | 70% | 30% |
| (2) | Compulsory national health insurance? | 31% | 69% |
| (3) | A requirement that able-bodied welfare recipients work for their benefits? | 99% | 1% |
| (4) | Allowing common situs picketing? | 20% | 80% |
| (5) | Postponement of schedule increases in the minimum wage? | 67% | 33% |

Remarks of Rep. Charles E. Bennett of Jacksonville in the U.S. House of Representatives as reported in the *Congressional Record* May 1, 1979.

# More Than a Program for the Terminally Ill

"What is a hospice?" Ask three different doctors and you will get three different answers, each depending on the questioned doctor's interest and specialty. Ask a hospital administrator and you will get another answer. The Department of HEW, after surveying existing hospice programs in this country and abroad, published descriptive guidelines in the federal register which defined a hospice as "a facility that emphasized comprehensive services by an interdisciplinary team with emphasis on around-the-clock availability of medical and nursing skills, having current capabilities of providing home health services . . . providing institutional services which may substitute for acute hospital care."

The word "hospice" from the Latin word for "host" or receiver of guests, in medieval times, meant a place of shelter for travelers on difficult journeys. Current use of the term means different things to different people and while there may be differences from one program to another, the central characteristics remain the same. The hospice movement, actively begun in Great Britain more than ten years ago, has as its key component, utmost respect for the patients. The program includes three closely integrated components: A home care program, outpatient facilities and an inpatient unit, providing an open system in which continuity of care is utmost. Alternating between home and the hospital, these patients, with symptoms under control, can spend more time with their families and within their physical limitations do whatever activities are meaningful to them. St. Christopher's Hospice, completed in 1967, at a cost of more than one million dollars raised entirely from gifts and grants, has a yearly operating budget of $400,000, two-thirds of which comes from the National Health Service in the U.S.

Donations and a grant from the National Cancer Society gave impetus to Hospice, Inc. in New Haven, Conn. Stated goals of this hospice are to keep the patient at home as long as possible, to educate health professionals and the laity, to supplement existing services, to support the family as a unit of care, to help the patient to live as fully as possible and to keep costs down. Criteria for admission include a prognosis that death will occur in either weeks or months and the referring physician must agree to continue his association with the patient.

Hospice staffs must be specialists in care of the dying, for self-evident requirements of a dying man are to have his symptoms relieved, to be allowed to die with dignity and with peace of mind and the assurance that he will not be abandoned. As experiences in England suggest, dying patients need other people more than privacy, so every member of the hospice team must be involved and understand the plan of care. Any one member who is less than fully committed can destroy the patient's trust and confidence. The patient's conviction that the team will not let him or her down is crucial to effective pain management. Interdisciplinary care cannot disintegrate into fragmented care, leaving the bewildered patient and family wondering who is in charge of dealing with which problems. An absolute must is a warm personal relationship with the patient and his family, based on mutual understanding and trust. In a world that sometimes appears too technical, too efficient and too frightened to acknowledge that dying is a phase of life, the hospice also tends to the needs of the family of the dying person by conforming with their wishes to be with the patient at death, to be helpful, to be assured of the patient's comfort, to be daily informed of the patient's condition and to be privately informed of the patient's impending death. Confidence and serenity depend on more than blunting pain, for no drug is a substitute for the warm understanding support of a physician. Hospice care is palliative therapy that picks up when curative medicine can do no more. To achieve the ideal, both medically and humanely for the dying may seem more like defeat to one physician but is an opportunity for another.

The hospice program is a humane, holistic approach to medical care that has great support from all aspects of society. We must study, to understand, to implement and improve it, to supervise it and protect this innovation from profiteering, commercial exploitation or lowering of standards, but more, we should do what we can to foster the development of this valuable addition as an aid in improving the health care in our country.

C.M.C.

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Reprinted from the Editorials-Letters-Viewpoints section of Jacksonville Medicine, May 1979.

# Board Certification is a Time-Tested, Reliable Measure

John R. Boyer, M.D.

The American Society of Plastic and Reconstructive Surgeons is under attack from the Federal Trade Commission to drop a requirement that its members be board certified. The rationale for this proposed action is that this eligibility requirement might constitute unfair restraint of trade to those without board certification.

The essence of the FTC's mistaken theory is that medical costs can be lowered if the quality standards of medical care, as represented by board certification, are lowered. The preliminary compliant notes that the A.S.P.R.S. has maintained "unduly high standards for plastic surgery." Specific activities viewed as restrictive of competition in the proposed "cease and desist" order includes; refraining from the use of "plastic or plastic surgeon" to describe a field of medicine. The order also demands that if the A.S.P.R.S. is questioned about a physician's qualifications to perform plastic surgery, it is to be answered with a prescribed statement dictated by FTC lawyers, to downgrade board certification.

Finally, the FTC staff insist that the A.S.P.R.S. disaffiliate with any regional society (Florida Society of Plastic and Reconstructive Surgeons) which refuses to sign a statement agreeing to abide by whatever "cease and desist" order may be agreed upon.

The FTC has claimed that advertising will increase competition and lower the costs of medical care. In California a number of advertising clinics of self-designated "plastic surgeons" who are not board certified have produced many discontented patients and malpractice suits. These "entrepreneurs" frequently charge fees greater than those of certified plastic surgeons and tend to harm the good image of qualified physicians. We must instill in the public an awareness that not all physicians can do everything well "despite their advertising claims."

After spending eight years in residency, certification by two boards and recertification by the American Board of Plastic Surgery, I am confused by the federal bureaucracy demands for elevating standards by one agency and lowering them by another. To increase the confusion, is a recent Supreme Court ruling that prohibits "optometrists" from using "any name" other than that on their state license to practice. Will this include plastic surgery or other specialties?

Board certification is a time-testing reliable measure available to all licensed physicians which serves not only as a guide for consumers and hospitals, but also assures a higher degree of professional fitness. If the FTC succeeds against one small specialty, who will be next? We ask for your support in our struggle against more governmental control of medicine.

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Reprinted from the Imperial Polk County Medical Association Bulletin, April 1979.

Dr. Boyer is President, Florida Society of Plastic and Reconstructive Surgeons.

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**Life can only be understood by looking backward,**
**But it must be lived by looking forward.**

# Is Anybody Out There Paying Attention?

**Edward J. Sullivan, M.D.**

If no one believed it previously, it seems abundantly clear that we are now in a real fuel oil crisis. Florida is the eighth most dependent state on fuel oil for generation of electricity. Forty-six per cent of all electricity in 1977 was generated from fuel-fired generators. Only 18% of the electricity in Florida was provided by nuclear plants (F.P.L. estimates that its three nuclear plants have saved a total of $923,000,000 in fuel costs since 1972 — that's correct, almost a billion dollars).

OPEC oil is now manipulated to the $20. per barrel range on the world-wide spot market. Newly discovered domestic oil sells for $12. per barrel.

This country uses 19 million barrels of oil per day. Before the revolution Iran produced 6½ million of oil per day, and now plans to produce only 3 million barrels per day at maximum. We are told that the east coast is primarily dependent upon OPEC oil imports. There is already a shortage of jet fuel in areas of high heating oil use, and some oil companies have cut back as much as 20% on customary deliveries of fuel oil products.

Here at home, JEA has increased its prices on 30 separate occasions since October 1, 1978. Before the 1973-74 embargo, JEA paid $5-6 per barrel for its oil. It is now paying $20.50 per barrel for its low-sulphur fuel oil. We are now facing an increase in charges of $4.50 per 1000 kilowatt hours of electricity up to a total cost of $51.92 per 1000 kilowatt hours. This represents a 9.5% increase over the previous rate. A summer gasoline shortage is expected for 1979, especially for the 50% of automobiles using lead-free gasoline, which now sells for as much as 10¢ a gallon premium over regular.

The point of all of the above is, what are we doing about it? Look around at the various public buildings, including hospitals. Internal and external cosmetic lighting is everywhere, including hospitals. Doctor's lounges have the curtains drawn in the daytime, shutting out the sunlight so that fluorescent lights can be used. The decorative lamps are turned on when no one is using them. The lights are left on in the operating rooms and other work areas long after the day's work is finished. The hallways are brightly enough lighted that one can comfortably read fine print at any point along the way. Hot water is unnecessarily provided in many lavatories throughout the hospitals.

Four 4′ long fluorescent light bulbs, which might be grouped in a ceiling light fixture in a hospital hallway, uses 160 watts to operate. When this is run day and night for one year at current charges, it burns $72.85.

We have an opportunity in our hospitals to set an example, to combat the oil shortage by economical use of energy, and at the same time to strike a blow for cost containment. If we demonstrate to the federal government that we are really concerned about energy cost and usage, maybe they will get concerned enough to develop a national policy.

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Reprinted from the Editorials—Letters—Viewpoints section of Jacksonville Medicine, April 1979.

Dr. Sullivan is Editor of Jacksonville Magazine.

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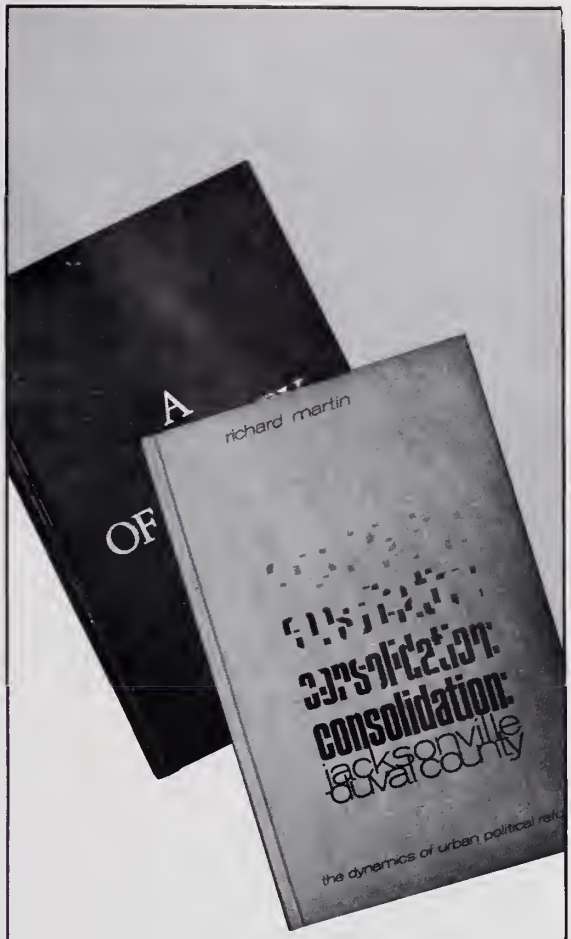


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|---|---|---|---|---|---|
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| Baker (See Nassau | | | | | |
| Bay | William A Sybers, M.D., Panama City | Marion J. Mathews Jr., M.D., Panama City | 1st Tues | 2 | 78 |
| Bradford (See Alachua) | | | | | |
| Brevard | Richard Baney, M D, Melbourne | Paul Popovich, M.D., Melbourne | 2nd Tues | 9 | 239 |
| Broward | William C. Hartley, M.D., Hollywood | Peter A. Tomasello, M D., Plantation | 4th Tues | 148 | 1,278 |
| Calhoun (See Panhandle) | | | | | |
| Capital | William J Hutchison, M D., Tallahassee | George F Slada, M.D., Tallahassee | 2nd Mon | 45 | 189 |
| Charlotte | Charlas H. Wingo, M.D., Punta Gorda | Stephen R Roddy, M D., Charlotte Harbor | 3rd Mon | 7 | 83 |
| Citrus-Hernando | Carlos F Gonzalez, M D., Crystal River | Jose R Barrios, M.D., Brooksville | 3rd Thurs | 1 | 50 |
| Clay | Jayalakshmi Padmanabhan, M D., Orange Park | Osbey L Sayler, M.D., Orange Park | 2nd Thurs | 5 | 37 |
| Collier | Edwin E. Dean, M D., Naples | Allen S Weiss, M.D., Naples | 3rd Wed | 3 | 99 |
| Columbia | Don D. Weiffenbach, M.D., Lake City | James F Kazmierski, M D., Lake City | 3rd Wed. | 1 | 24 |
| Dade | Manual L. Carbonnell, M D., Miami | Julian H Groff, M D., N Miami Beach | 1st Tues | 290 | 2,684 |
| DeSoto-Hardee-Glades | Ernest P Palmer, M D., Wauchula | Hanson S. Chen, M.D., Wauchula | 1st Tues | 4 | 24 |
| Dixie (See Taylor) | | | | | |
| Duval | Yank D. Coble Jr., M.D., Jacksonville | Robert H Threlkel, M.D., Jacksonville | 1st Tues | 114 | 696 |
| Escambia | Robert K Wilson Jr, M D., Pensacola | Paul T. Baroco, M.D., Pensacola | 2nd Tues | 44 | 264 |
| Flagler | John M. Canakaris, M D., Bunnell | Eduardo Barrera, M D., Bunnell | 2nd Tues | | 18 |
| Franklin-Gulf | Photis J Nichols, M D., Apalachicola | W T. Waathington, M D., Apalachicola | Last Wed | 0 | 9 |
| Gadsden (See Panhandle) | | | | | |
| Gilchrist (See Alachua) | | | | | |
| Handry (See Palm Beach) | | | | | |
| Highlands | H Frederick Keibar, M D, Sebring | Kye C. Pahk, M D, Sebring | 3rd Mon | 2 | 48 |
| Hillsborough | Francis C Coleman, M.D., Tampa | Robert E. McCammon, M.D., Tampa | 1st Tues | 130 | 683 |
| Holmes (See Panhandle) | | | | | |
| Indian River | Donald Ames, M D, Vero Beach | Paul B Graham, M D, Vero Beach | 3rd Tues | 12 | 80 |
| Jackson (See Panhandla) | | | | | |
| Jefferson (See Capital) | | | | | |
| Lake | Joseph Holland, M D, Leesburg | John Geeslin, M D, Eustis | 1st Wed | 0 | 93 |
| Lee | Cecil C Beehler, M D., Fort Myers | Edward C Laird, M D., Cape Coral | 3rd Mon. | 11 | 207 |
| Leon (See Capital) | | | | | |
| Levy (See Marion) | | | | | |
| Liberty (See Panhandle) | | | | | |
| Madison | A. G Dulay, M D., Madison | William J. Bibb, M.D, Madison | 1st Tues | 2 | 6 |
| Manatee | Roger A Meyer, M.D., Bradenton | Peter Matinna, M D, Bradanton | 4th Tuas | 25 | 151 |
| Marion | Charles E. Jordan, M D, Ocala | David S Whittaker, M D, Ocala | 3rd Tues | 10 | 78 |
| Martin | Robart H Pare, M D, Stuart | John W Eckarsley Jr., M D, Stuart | 1st Thurs | 7 | 74 |
| Monroe | Robert D Carraway, M D., Key West | William D. Clark, M D, Kay West | 3rd Thurs | 4 | 54 |
| Nassau | Eduardo Dieguez, M D., Fernandina Beach | Cecil B. Brawton, M D., Farnandina Beach | 3rd Thurs | 3 | 17 |
| Okaloosa | Dan Beraha, M D., Ft Walton Beach | Jamas E. Mills, M D., Ft Walton Baach | 3rd Tues | 8 | 58 |
| Orange | Robert B Trumbo, M D., Orlando | John P Taggart, M D., Orlando | 3rd Wad | 58 | 636 |
| Osceola | Pedro I Gonzales, M D, Kissimmee | Sixto R Santos, M D, Kissimmae | 3rd Tues | 2 | 30 |
| Palm Beach | Luis Guerrero, M D, Belle Glade | Richard Cavanaghz M D, Boynton Beach | 4th Mon. | 65 | 614 |
| Panhandle | Pat M Woodward, M D, Quincy | William F Brunnar, M D., Marianna | 1st Thurs | 5 | 52 |
| Pasco | Hugh B Severs II, M D, New Port Richey | Robert D May, M D, New Port Richey | 2nd Thurs | 24 | 55 |
| Pinellas | James M Neill, M D, St Petersburg | Thomas M Daniel, M D., Clearwater | 1st Mon | 151 | 721 |
| Polk | Frank J. Fischer, M D, Lakeland | Wiley E Koon, M D., Winter Havan | 2nd Wed | 31 | 316 |
| Putnam | Fernando J Martinez, M D., Palatka | John Wolfanden, M D, Palatka | 2nd Tues | 0 | 28 |
| St Lucie-Okeechobee | William H Meyer Jr., M D, Ft Pierce | David L. Fromang, M D., Ft. Piarce | 3rd Thurs | 1 | 70 |
| Santa Rosa | E. W Sutton, M D., Milton | Claude J Barnes, M D., Milton | 1st Tues | 1 | 16 |
| Sarasota | Lee S Harris, M D, Sarasota | William E DesPortes, M D, Sarasota | 2nd Tues | 22 | 281 |
| Seminole | Clyde K Meade, M D, Daltona | Robert A Gay, M D, Sanford | 3rd Tues | 0 | 61 |
| Sumter (See Citrus-Hernando) | | | | | |
| Suwanee-Hamilton-Lafayette | Irvin C Bembry, M D., Jasper | James M Janousek, M D., Live Oak | 3rd Mon | 1 | 12 |
| Taylor | John H Parker Jr., M D, Perry | John A Dyal, M D, Perry | Last Mon | 1 | 12 |
| Union (See Alachua) | | | | | |
| Volusia | Frank J Lill, M D, Daytona Beach | C Robert DeArmes Jr., Ormond Beach | 2nd Tues | 3 | 239 |
| Wakulla (See Capital) | | | | | |
| Walton | Thomas G. Spence, M D, DeFuniak Springs | E H Myars, M D, DaFuniak Springs | 2nd Tues | 0 | 7 |
| Washington | Ghulham Dastgir, M D, Chipley | Muhammed I. Zafar, M D, Chipley | 3rd Tues | 1 | 7 |
| | | | Total | 1,327 | 10,778 |
| | | | Grand Total | | 12,105 |

# MEETINGS
## Approved by the FMA Committee on Continuing Medical Education

### SEPTEMBER

**Second Annual South East Pediatric Educational Conference of Florida**, Sept. 1-3, Cancun, Mexico. For information: Gerald T. Kilpatrick, M.D., 531 U.S. Highway #1, North Palm Beach 33408.

**17th Annual Seminar in Cardiology**, Sept. 4-11, London, England. For information: Henry J. L. Marriott, M.D., St. Anthony's Hospital, St. Petersburg 33705.

**Anesthesiology Review and Update**, Sept. 7-9, Sonesta Beach Hotel, Key Biscayne. For information: Dept. of Anesthesiology, Mt. Sinai Medical Center, 1200 N.W. 10th Ave., Miami 33136.

**Selected Topics in Surgical Oncology**, Sept. 8-9, Holiday Inn (The Casino), Pensacola Beach. For information: Richard D. Nauman, M.D., 5149 North 9th Ave., Suite 307, Pensacola 32504.

**Progress in Cardiology — 1979**, Sept. 12-14, Mt. Sinai Medical Center, Miami Beach. For information: CME Coordinator, Mt. Sinai Medical Center, 4300 Alton Road, Miami Beach 33140.

**A Basic A.S.I.F. Course on Treatment of Fractures and Non-Unions**, Sept. 12-15, Flag Pavilion, Jacksonville Beach. For information: Marshall Horowitz, M.D., 655 West 8th Street, Jacksonville 32209.

**Laparoscopy Course**, Sept. 24-25, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th St., Jacksonville 32209.

**Florida Society of Clinical Hypnosis Annual Workshop in Basic and Advanced Hypnosis**, Sept. 28-30, Bay Harbor Inn, 7700 Courtney Campbell Causeway, Tampa. For information: C. Mutter, M.D., 3661 South Miami Avenue, Suite 308, Miami 33133.

### OCTOBER

**Office Management Hypertension**, Oct. 3, Holiday-Inn—University Center, Gainesville.**

**Annual Meeting of the Society of Prospective Medicine**, Oct. 3-6, Don CeSar Hotel, St. Petersburg. For information: Ronald Blankenbaker, M.D., University of South Florida, College of Medicine, Dept. of Family Medicine, Tampa 33612.

**19th Workshop in Electrocardiography**, Oct. 4-8, Clearwater Beach. Henry J. L. Marriott, M.D., St. Anthony's Hospital, St. Petersburg 33705.

**Hyperalimentation in Modern Hospital Practice**, Oct. 9, Manatee Memorial Hospital, Bradenton. For information: Leonides Y. Teves, M.D., 706 39th St. W., Bradenton 33505.

**Radiology for the Emergency and Primary Care Physicians**, Oct. 10-14, Sahara Hotel, Las Vegas, Nevada. For information: W. T. Haeck, M.D., 3900 N.W. 79th Ave., Suite 469, Miami 33166.

**Fifth Pan American Seminar**, Oct. 15-19, Wolfson Auditorium, Miami Beach. For information: Federico R. Justiniani, M.D., 4300 Alton Road, Miami Beach 33140.

**Mercy Hospital Cardiovascular Symposium**, Oct. 18-20, OMNI International Hotel, Miami.*

**Current Concepts in Pulmonary & Infectious Diseases**, Oct. 19-20, Holiday Inn (The Casino), Pensacola Beach. For information: Richard D. Nauman, M.D., 5149 North 9th Ave., Suite 307, Pensacola 32504.

**Obstetrics and Gynecology Review Course**, Oct. 20-27, Royal Biscayne Beach Hotel & Racquet Club, Key Biscayne.*

**Ob-Gyn Pathology Course**, Oct. 27-28, Royal Biscayne Beach Hotel & Racquet Club, Key Biscayne.*

**Africa Safari Seminar**, Oct. 27-Nov. 10, Kenya, East Africa, For information: Dept. of Anesthesiology, Mt. Sinai Medical Center, 1200 N.W. 10th Ave., Miami 33136.

**Laparoscopy Course**, Oct. 29-30, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th Street, Jacksonville 32209.

### NOVEMBER

**EKG Interpretation and Arrhythmia Management**, Nov. 2-4, Don CeSar Beach Hotel, St. Petersburg. For information: Stephen E. Mattingly, 64 Inverness Dr. E., Englewood, Colorado 80112.

**10th Family Practice Review**, Nov. 5-9, Orlando Hyatt Hotel, Kissimmee.**

**Breast Cancer Therapy**, Nov. 6, Holy Cross Hospital, Fort Lauderdale. For information: Jon R. Fichtelman, M.D., P.O. Box 23460, Fort Lauderdale 33307.

**Update in Hypertension**, Nov. 13, Manatee Memorial Hospital, Bradenton. For information: Leonides Y. Teves, M.D., 706 39th St. W., Bradenton 33505.

**Common Pediatric Emergencies**, Nov. 15-17, Caribbean Gulf Hotel, Clearwater Beach. For information: Emergency Care Continuing Education Center, P.O. Box 9639, Marina Del Rey, California 90291.

**Review & Overview in EEG**, Nov. 17-19, Hilton Hotel, Jacksonville. For information: Jacob Green, M.D., 2550 Park St., Jacksonville 32204.

**Laparoscopy Course**, Nov. 19-20, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th St., Jacksonville 32209.

**Perplexing Cardiac Arrhythmias in Private Practice**, Nov. 28, Mt. Sinai Medical Center, Miami Beach. For information: Esther Cohen, CME Coordinator, 4300 Alton Rd., Miami Beach 33140.

**Uveitis Symposium**, Nov. 29-30, Medical Center, University of South Florida, Tampa.+

**3rd Annual Medical Aspects of Aging**, Nov. 30-Dec. 1, Holiday Inn-University Center, Gainesville.**

## DECEMBER

**Recent Advances in Treatment of Sleep Disorders,** Dec. 5, Mt. Sinai Medical Center, Miami Beach. For information: CME Coordinator, Mt. Sinai Medical Center, 4300 Alton Rd., Miami Beach 33140.

**Diabetes Update — 1979,** December 6, Curtis Hixon Convention Hall, Tampa. For information: R. V. Farese, M.D., University of South Florida, College of Medicine, Tampa 33612.

**Pulmonary Function Studies,** Dec. 8, Holy Cross Hospital, Fort Lauderdale. For information: Jon R. Fichtelman, M.D., P.O. Box 23460, Fort Lauderdale 33307.

**Ob-Gyn Ultrasound Seminar,** Dec. 12-16, Royal Beach Hotel & Racquet Club, Key Biscayne.*

**Laparoscopy Course,** Dec. 17-18, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th Street, Jacksonville 32209.

## 1980

## JANUARY

**17th Annual Postgraduate Seminar in Anesthesiology,** Jan. 10-13, Americana Hotel, Miami Beach. For information: Dept. of Anesthesiology, Mt. Sinai Medical Center, 1200 N.W. 10th Ave., Miami 33136.

**Law and the Emergency Department,** Jan. 11, Miami. For information: Emergency Medical Services Symposium, 3900 N.W. 79th Ave., Suite 469, Miami 33166.

**25th Annual Cardiovascular Seminar,** Jan. 11-12, Holiday Inn, Longboat Key. For information: E. Jerry Eatman, P.O. Box 12407, St. Petersburg 33733.

**Trinidad/Togago Seminar,** Jan. 13-20, Trinidad, West Indies. For information: Dept. of Anesthesiology, Mt. Sinai Medical Center, 1200 N.W. 10th Ave., Miami 33136.

**Second Annual Walt Disney World Pulmonary Wintercourse,** Jan. 14-18, Contemporary Resort Hotel, Lake Buena Vista. For information: Asher Marks, M.D., Chairman, Pulmonary Wintercourse Planning Committee, c/o Florida Lung Association, Box 8127, Jacksonville 32211.

**Far East Orient Seminar in Anesthesiology,** Jan. 26-Feb. 10, Philippines/Hong Kong/Thailand — Honolulu (optional). For information: Dept. of Anesthesiology, Mt. Sinai Medical Center, 1200 N.W. 10th Ave., Miami 33136.

**A. Neurological Update,** Jan. 28 — Feb. 1, Americana Hotel, Bal Harbour.*

**Second Annual Walt Disney World Pulmonary Wintercourse,** Jan. 14-17, Contemporary Hotel, Lake Buena Vista. For information: Asher Marks, M.D., Post Office Box 8127, Jacksonville 32211.

**Gynecologic Surgery Symposium,** Jan. 20-25, Royal Biscayne Beach Hotel & Racquet Club, Key Biscayne.*

**Intensive Care for Neurological Trauma and Disease,** Jan 24-27, Americana Hotel, Bal Harbour.*

## FEBRUARY

**National Burn Seminar,** Feb. 8-9, Gainesville Hilton, Gainesville.**

**Gynecologic Oncology Seminar,** Feb. 10-15, Royal Biscayne Beach Hotel & Racquet Club, Key Biscayne.*

**1st Annual Family Practice Update,** Feb. 18-22, Daytona Beach. For information: Ken Mead, Post Office Box 1990, Daytona Beach 32015.

**7th Annual Selected Topics in Urology,** Feb. 28-March 1, Gainesville Hilton, Gainesville.**

**Pediatric Dermatology Seminar,** Feb. 28-Mar. 2, Eden Roc Hotel, Miami Beach. For information: Guinter Kahn, M.D., 16800 N.W. 2nd Ave., Suite 401, North Miami Beach 33169.

## MARCH

**Ob-Gyn Caribbean Seminar,** Mar. 2-8, Caribbean Cruise.*

**Basic Neurology for Psychiatrists and Generalist,** Mar. 3-7, Konover Hotel, Miami Beach.*

**6th Annual Virginia Apgar Seminar,** Obstetric and Pediatric Anesthesia, March 7-9, Americana Hotel, Miami Beach. For information: Dept. of Anesthesia, Mt. Sinai Medical Center, 1200 N.W. 10th Ave., Miami 33136.

**Problems in Rheumatology,** March 12-15, Don CeSar Beach Resort Hotel, St. Petersburg Beach. For information: Bernard F. Germain, M.D., Division of Rheumatology, Dept. of Internal Medicine, University of South Florida College of Medicine, Tampa 33612.

**Ob-Gyn Cruise Seminar,** Mar. 12-24, Aboard the "DORIC".*

**11th Annual Topics in Internal Medicine,** March 20-22, Gainesville Hilton, Gainesville.**

**6th Annual Postgraduate Seminar in I.V. and I.M. Dental Sedation,** March 20-23, Americana Hotel, Miami Beach. For information: Dept. of Anesthesiology, Mt. Sinai Medical Center, 1200 N.W. 10th Ave., Miami 33136.

**11th Family Practice Review,** March 31-April 4, Orlando Hyatt Hotel, Kissimmee.**

## JUNE

**Cardiology for the Practitioner,** June 4-6, The Breakers, Palm Beach.**

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**MKSAP-V (Internal Medicine Review) (American College of Physicians),** June 23-27, The Dutch Inn, Lake Buena Vista.**

***For information: Contact Division of Continuing Medical Education, D23-3, University of Miami School of Medicine, P.O. Box 016960, Miami 33101. Tel. (305) 547-6716.**

****For information: Contact Division of Continuing Education, Box J-233, J. Hillis Miller Health Center, Gainesville 32610. Tel. (904) 392-3143, or 392-3183.**

**+For information: Contact Janifer M. Judisch, M.D., CME, University of South Florida, Tampa 33620. Tel. (813) 974-2074.**

# U. S. ARMY MEDICAL DEPARTMENT

# ARMY FIRST YEAR GRADUATE MEDICAL EDUCATION

## GENERAL

The Army Medical Department (AMEDD) represents the largest comprehensive system of health care in the United States. Within one centrally directed system, the medical disciplines of patient care, preventive medicine, research, education, and administration are coordinated to provide a unified system of health care for approximately three and one-half million people including Active Army personnel, their dependents, as well as retired military personnel and their dependents.

During the summer of 1980, the Army is offering a large number of First Year Graduate Medical Education (FYGME) positions. Previously, most positions were filled by participants in the US Army Health Professions Scholarship Program (HPSP). However, for training beginning in July 1980, the Army will be actively seeking qualified civilian applicants who have no current Army affiliation.

## DESCRIPTION

Army medical training programs are among the best in the nation. All are approved by the Liaison Committee on Graduate Medical Education of the American Medical Association. Virtually all recognized residencies are offered. Most Army training facilities are affiliated with a medical school. Medical centers and hospitals are well equipped with laboratory, medical, surgical, radiological, library and other requisite facilities. Medical records keeping is excellent.

All patients are available as teaching patients. The range of cases, both in age and complexity, is virtually impossible to duplicate. Because of the scope of the Army's activities and its highly sophisticated evacuation system, you will have the chance to see and study diseases you would never encounter in most programs. Furthermore, you have no worry about your patient's ability to pay.

**The following Army FYGME programs are offered:**

(1) **Flexible.** The flexible FYGME program is designed as a year of broad medical education prior to pursuing a specialized residency or as a program for individuals as yet undecided about further specialization. Four months of medicine are required in this program along with additional requirements and electives that vary slightly from teaching center to teaching center.

(2) **Categorical.** Categorical programs are offered in medicine, surgery, obstetrics/ gynecology, pathology, pediatrics, physical medicine, and family practice. The majority of the 12 month period is spent on the service concerned or in related areas and is considered by most of the appropriate specialty boards as the first year of residency training.

(3) **Categorical diversified.** These programs are essentially a combination of the above two and are offered in radiology, psychiatry, neurology, and anesthesiology. The primary emphasis is upon the major specialty with additional required and elective rotations on other services.

To find out more information concerning this program, the eligibility criteria, service obligation, benefits and application procedures contact the AMEDD Personnel Counselor serving your area.

**Deadline** for applications is **1 September 1979**. All applicants are encouraged to also participate in the NIRMP. Sections for the Army FYGME Program will be announced in sufficient time for selectees to withdraw from the NIRMP.

*AN EQUAL OPPORTUNITY EMPLOYER*

FL: North: CPT Roger Baderschneider (305) 896-0780 South: CPT Samuel Fellows (305) 358-6489

# CLASSIFIED ADS

## Physicians Wanted

### FAMILY PRACTITIONERS

FAMILY PRACTITIONER OR INTERNIST wanted to share facilities with three practitioners in solo practice. Major equipment provided. Rent $250 per month. Competent laboratory and x-ray departments with income based on use. Bookkeeping system and receptionist shared. Contact: T. C. Kenaston Jr., M.D., P.O. Box 550, Cocoa, Florida 32922.

WANTED: County Health Department Physician to carry out Detox Center Services and Primary Care Services in clinics. 40 hour week. Excellent salary, plus benefits of sick and annual leave, hospitalization, life insurance, social security and retirement. Call: S. D. Rowley, M.D., Director, Duval County Health Department, Jacksonville (904) 633-2280.

FOUR MAN FAMILY PRACTICE incorporated expense-sharing group. Equal ownership of building and equipment. Excellent gross. Down payment required. Preferably board diplomate or eligible. James B. Hodge, M.D., 2416 Cleveland Street, Tampa, Florida 33609. Phone: (813) 253-3164.

FAMILY PRACTITIONER for established rural outpatient clinic in Pasco County, Florida. Send curriculum vitae to P.O. Box 986, Dade City, Florida 33525. An equal opportunity employer.

### SPECIALISTS

CENTRAL FLORIDA MULTI-SPECIALTY CLINIC HAS OPENING for second general surgeon. Good financial opportunity; new well equipped office near three hospitals. Write C-893, P.O. Box 2411, Jacksonville, Florida 32203.

MULTISPECIALTY GROUP OF PHYSICIANS located in North Florida seeking to expand in the following specialties: Rheumatology, Gastroenterology, Hematology/Oncology, Endocrinology, and Infectious Diseases. Please send curriculum vitae to: C-928, P.O. Box 2411, Jacksonville, Florida 32203.

EMERGENCY PHYSICIANS for position with young expanding group. Liberal salary package. Send CV to I. Bloomfield, M.D., Medical Director, P.O. Box 160132 Snapper Creek Station, Miami, Florida 33116 or call (305) 596-2896.

ORTHOPEDIST — Excellent opportunity for the right man in twenty physician multispecialty group in beautiful Northwest Florida beach community. Immediate incentive compensation plan with guarantee leading to full partnership. No investment required. Ideal practice setting in new building located directly across the street from new modern hospital. Contact: Theodore D. Rahe, Administrator, White-Wilson Medical Center, Fort Walton Beach, Florida 32548. (904) 863-4121.

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GROUP OF SIX INTERNIST — SOUTH EAST COAST OF FLORIDA — Has opening for an Allergist or Dermatologist. Type of association to be determined by qualifications. Reply to P.O. Box 147, Lake Worth, Florida 33460.

ORTHOPEDIST — Board eligible or board certified Orthopedic Surgeon to join 34-man multispecialty group located in Southeast Florida. Candidates interested in this position should apply to Richard C. Hudson, M.D., Medical Director, Palm Beach Medical Group, Box 3167, West Palm Beach, Florida 33401.

INTERNIST — CARDIOLOGIST, Board certified, preferred, considered, to join very busy office-based private practice in Southern Florida. Ample opportunity for noninvasive procedures in office and hospitalized patients. Position available Sept. 1, 1979. Write C-941, P.O. Box 2411, Jacksonville, Florida 32203.

### MISCELLANEOUS

PHYSICIAN ASSISTANT: graduating in August, age 25, married. Resume mailed on request. Ronald J. Fucci, 390-4 Maquire Village, Gainesville, Florida 32603.

## Situations Wanted

FAMILY PRACTITIONER, 31, board eligible, seeks group, associate, partnership or solo in southern Florida. Available February 1st. Florida license applied for. Please reply: 19781 Futura Drive, Yorba Linda, California 92686.

NEUROLOGIST, 35, board- eligible, seeks partnership, group or hospital-based practice in any part of Florida. Experienced in EEG, EMG, and CT. Randolph S. Geslani, M.D., 1300 East & West Road, West Seneca, New York 13224.

PEDIATRICIAN, 35, board eligible, Florida licensed, wants opportunity on or near Florida coast. Jill U. Gallien, M.D., P.O. Box 1733, Natchez, Miss. 39120, (601) 442-5332.

ANESTHESIOLOGIST, Florida licensed, board eligible, wide experience in all anesthetic modalities, seeks practice opportunity in Florida. Prefer fee-for-service, other reasonable offers considered. Available July 1, 1979. Locum tenens with possible permanent association also considered. Phone: (516) 938-0474.

INTERNIST — PULMONOLOGIST, SEEKING solo, group or hospital based practice. Will consider buying practice. ECFMG. Available July 1979. Contact Dr. Malpani, 1165 Rte. 22, Apt. 22, N. Plainfield, N.J. 07061.

FAMILY PRACTITIONER: Board certified desires part-time work or association in Central Florida. Write C-942, P.O. Box 2411, Jacksonville, Florida 32203.

FAMILY PHYSICIAN Board certified, Florida license, over 25 years in practice plans to relocate to Florida and desires association with physician or medical group in Miami area. Reply to P.O. Box 1472, Landover, Maryland 20785.

### Practices Available

INTERNIST PRACTICE FOR SALE in Jacksonville. Equipment, office lease and patients charts. For further information write C-929, P.O. Box 2411, Jacksonville 32203.

CENTRAL FLORIDA FAMILY PRACTICE. Condo office in a medical-dental complex for sale by owner. 1,200 square feet — 4 examining rooms, etc. 95% collection rate. Good area. For details call (305) 647-6454 or (305) 830-0570 after five.

WELL ESTABLISHED OTOLARYNGOLOGY PRACTICE available in growing area of South Florida. Equipment plus corporate investment are possible to purchase. M.D. leaving for personal reasons. Write Box 786, Boynton Beach, Florida 33435.

### Real Estate

OUTSTANDING LOCATION FOR SPECIALIST: St. Nicholas Medical Center. Central location, off street parking and all utilities furnished (including janitor service). Contact W. G. Allen, Jr., Owner-Manager, St. Nicholas Medical Center, 3127 Atlantic Boulevard, Jacksonville 32207. Phone: (904) 398-5500.

LAKELAND, FLORIDA: FOR SALE, 6% down. Air-conditioned office for one to three physicians. Main street, 168 x 140 ft.; double parking lots; extra cottage. Dr. L. Polskin, Box 15966, Honolulu, Hawaii 96815.

FLORIDA — (SOUTHEAST) — DELRAY: Offices for lease in single story medical plaza adjacent to Interstate-95; busy intersection and newly built convalescent center; tremendous opportunity to grow with a rapidly growing middle class community of single-family and condominium dwellings. Contact: Lawrence M. Landis, 900 S. Congress Ave., Delray, Florida 33445. Phone: (305) 278-0062.

JACKSONVILLE. 1,500 square feet, medically designed office available in newly refurbished Shops of Sherwood (northwest area of Jacksonville). A/C, ample parking. Located in stable, middle income residential community which needs medical doctor. Ideal for growing practice. Some equipment available. Start at $250 per month. Call collect (305) 446-4284.

26 ACRES OF WOODED LAND, North Carolina, Near Smokey Mountains. Four mountain streams. Surveyed into 1-2 acre lots for potential development. $36,000. Contact George Fink, M.D. (904) 733-1215.

FOR YOU AND YOUR FRIENDS: Property close to winter skiing facility; gentle mountain slopes and trails for hiking, motor bikes, horseback travel, etc. Spring-fed streams. Unspoiled forest and mountain ridges. Interior road system. 275 acres near Wilkesboro, N.C. $137,500 cash or very easy financing. Call Wiegand Real Estate, Inc., P.O. Box 423, Conway, S.C., 29526. Phone: (803) 365-5545.

BREVARD COUNTY (Cape Kennedy Area). Several outstanding office suites for lease and/or sale in Cocoa, Cocoa Beach, Titusville, and Melbourne. Can be tailored to individual or clinical needs. Contact: Trend Realty, Inc. Realtors, P. O. Box 39, Cocoa Beach, Florida 32931. Attention: Dudley Hain, Realtor-Associate, (305) 783-8686.

FOR SALE: MEDICAL BUILDING — OCALA, FLORIDA. 8,200 sq. ft. Built 1974, unique architecture, Lead x-ray room, two blocks from hospitals. 2,200 sq. ft. currently leased. MUST SELL QUICK!! Priced at $560,000 with 29% down or make offer!! Contact Joyce Moody, salesman Res. (904) 629-3747. John J. Piccone Real Estate, Inc., 2941 N.E. 3rd St., Ocala, Florida 32670.

MEDICAL SUITE: 1,200 ft. condominium specially suited for General Practitioner, Internist, etc. One block from hospital. $101,000. Joyce Moody, Salesman, Res. (904) 629-3747 or (904) 622-5717 John J. Piccione Real Estate, Inc., 2941 N.E. 3rd St., Ocala, Florida 32670.

FOR RENT: Beautiful new office under construction. Prime location in growing Port Charlotte. Phone H.S. Ardel, D.D.S. (813) 629-4804.

WATERFRONT HOME — ST. JOHN'S RIVER — ORANGE PARK: An interesting design concept, every room facing the water with sliding glass doors to the river, live oaks, one acre. Kitchen overlooks natural woods. Cement bulkhead and secluded. By appointment (904) 264-4407.

LONGWOOD — NEAR ORLANDO — CENTRAL FLORIDA: Offices for lease in Medical-Dental Park adjacent to Interstate 4 and 434. Excellent opportunity in rapidly growing middle class of single family developments. Suitable for GP, OB-GYN, Allergist, ENT or Ophthalmologist. Contact A. R. MacPherson, M.D., 331 N. Maitland Avenue, Maitland, Florida 32751 or phone (305) 645-1166.

### Art

FINE ART. Major paintings by modern and contemporary masters. DeKooning, Johns, Kelly, Lichtenstein, Louis, Oldenburg, Pollock, Rauschenberg, Twombly, Warhol and others. By appointment only. Marvin Ross Friedman & Co., 15451 Southwest 67 Court, Miami, Florida 33157. (305) 233-4281.

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- ☐ An unsurpassed safety record
- ☐ Predictable patient response
- ☐ Minimal effect on mental acuity at recommended doses
- ☐ Minimal interference with many primary medications, such as antacids, anticholinergics, diuretics, cardiac glycosides and antihypertensive agents

**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications:** Relief of anxiety and tension occurring alone or accompanying various disease states. Efficacy beyond four months not established by systematic clinical studies. Periodic reassessment of therapy recommended.

**Contraindications:** Patients with known hypersensitivity to the drug.

**Warnings:** Warn patients that mental and/or physical abilities required for tasks such as driving or operating machinery may be impaired, as may be mental alertness in children, and that concomitant use with alcohol or CNS depressants may have an additive effect. Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported.

**Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

**Precautions:** In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

**Adverse Reactions:** Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

**Usual Daily Dosage:** Individualize for maximum beneficial effects. Oral—Adults: Mild and moderate anxiety and tension, 5 or 10 mg t.i.d. or q.i.d.; severe states, 20 or 25 mg t.i.d. or q.i.d. Geriatric patients: 5 mg b.i.d. to q.i.d. (See Precautions.)

**Supplied:** Librium® (chlordiazepoxide HCl) Capsules, 5 mg, 10 mg and 25 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10. Libritabs® (chlordiazepoxide) Tablets, 5 mg, 10 mg and 25 mg—bottles of 100 and 500. With respect to clinical activity, capsules and tablets are indistinguishable.

## *synonymous with relief of anxiety*

ROCHE

Roche Products Inc.
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Please see following page.

# Librium® Ⓒ IV

chlordiazepoxide HCl/Roche

5 mg, 10 mg, 25 mg capsules

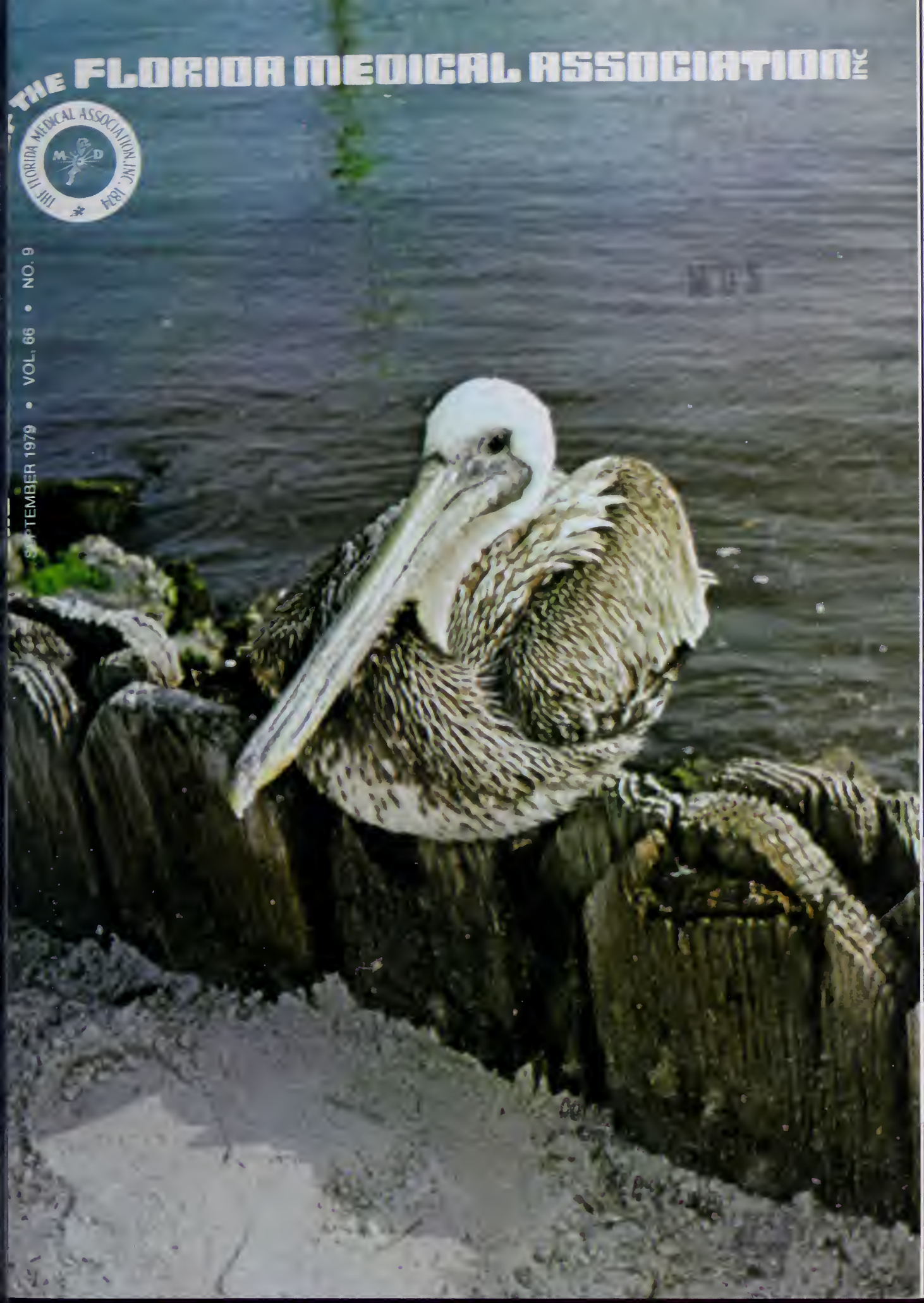
synonymous with relief of anxiety

ROCHE

Please see preceding page for a summary of product information.

# THE FLORIDA MEDICAL ASSOCIATION INC

SEPTEMBER 1979 • VOL. 66 • NO. 9



# A character all its own.

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But the individual character of Valium is even more apparent clinically than pharmacokinetically. And far more significant. That's because of the patient response obtained with Valium. A response which brings a calmer frame of mind. A response which has a pronounced effect on the somatic symptoms of anxiety, particularly muscular tension. A response which helps the patient feel more like himself again because of the way Valium reduces the overwhelming symptoms of anxiety and psychic tension.

Another important aspect of the clinical character of Valium is safety. Though drowsiness, ataxia and fatigue are possible, these and more serious side effects are rarely a problem. Of course, as with all CNS-acting drugs, patients taking Valium should be cautioned against driving, operating dangerous machinery or the simultaneous ingestion of alcohol.

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# Valium® (IV)
## diazepam/Roche

2-mg, 5-mg, 10-mg scored tablets

**a prudent choice in psychic tension and anxiety**

**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications:** Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).
The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

**Contraindicated:** Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

**Warnings:** Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

**Precautions:** If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

**Side Effects:** Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

**Dosage:** Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

**Supplied:** Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10.

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### On the cover

The brown Pelican native to Florida. Photograph by Jerrold A. Van Dyke, M.D., former Assistant Editor of the *Journal*, now an obstetrics and gynecology resident at Washington University School of Medicine, St. Louis, Missouri

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**Brief Summary of Prescribing Information**

**Indications and Usage:** Symptomatic relief of anxiety, tension, agitation, irritability and insomnia associated with anxiety neuroses and transient situational disturbances; anxiety associated with depressive symptoms and as a treatment of symptoms of anxiety if such symptoms are a significant feature of functional or organic disorders, particularly gastrointestinal or cardiovascular

Effectiveness in long-term use, i e , more than 4 months, has not been assessed by systematic clinical studies Reassess periodically usefulness of the drug for the individual patient.

**Contraindications:** Known sensitivity to benzodiazepines or acute narrow-angle glaucoma

**Warnings:** Not recommended in primary depressive disorders or psychoses. As with all CNS-acting drugs, warn patients on lorazepam not to operate machinery or motor vehicles, and of diminished tolerance for alcohol and other CNS depressants

Physical and Psychological Dependence. Withdrawal symptoms like those noted with barbiturates and alcohol have occurred following abrupt discontinuance of benzodiazepines (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating) Addiction-prone individuals, e g drug addicts and alcoholics, should be under careful surveillance when on benzodiazepines because of their predisposition to habituation and dependence. Withdrawal symptoms have also been reported following abrupt discontinuance of benzodiazepines taken continuously at therapeutic levels for several months

**Precautions:** In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid oversedation

Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may result in symptoms like those being treated anxiety, agitation, irritability, tension, insomnia and occasional convulsions

Observe usual precautions with impaired renal or hepatic function

Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular component

Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg kg day No effect dose was 1 25mg/kg/day (approximately 6 times the maximum human therapeutic dose of 10mg day) Effect was reversible only when treatment was withdrawn within 2 months of first observation Clinical significance is unknown, but use of lorazepam for prolonged periods and in geriatric patients requires caution and frequent monitoring for symptoms of upper G I disease

Safety and effectiveness in children under 12 years have not been established.

ESSENTIAL LABORATORY TESTS Some patients have developed leukopenia, some have had elevations of LDH As with other benzodiazepines, periodic blood counts and liver function tests are recommended during long-term therapy

CLINICALLY SIGNIFICANT DRUG INTERACTIONS Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol

CARCINOGENESIS AND MUTAGENESIS No evidence of carcinogenic potential emerged in rats during an 18-month study No studies regarding mutagenesis have been performed.

PREGNANCY Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschisis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lower doses Clinical significance of these findings is not known However, increased risk of congenital malformations associated with use of minor tranquilizers (chlordiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided Possibility that a woman of child-bearing potential may be pregnant at institution of therapy should be considered Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug

In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide

NURSING MOTHERS It is not known if oral lorazepam is excreted in human milk like other benzodiazepines As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk

**Adverse Reactions,** if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients, most frequent adverse reaction is sedation (15 9%), followed by dizziness (6.9%), weakness (4 2%) and unsteadiness (3 4%) Less frequent are disorientation, depression, nausea change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations Incidence of sedation and unsteadiness increased with age Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety

**Overdosage:** In management of overdosage with any drug, bear in mind that multiple agents may have been taken Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring of vital signs and close observation Hypotension, though unlikely, usually may be controlled with Levarterenol Bitartrate Injection U S P Usefulness of dialysis has not been determined

**Ativan® IV for (lorazepam) Anxiety**

***Dosage:*** **Individualize for maximum beneficial effects. Increase dose gradually when needed, giving higher evening dose before increasing daytime doses. Anxiety, usually 2-3mg/day given b.i.d. or t.i.d.; dosage may vary from 1 to 10mg/day in divided doses. For elderly or debilitated, initially 1-2mg/day; insomnia due to anxiety or transient situational stress, 2-4mg h.s.**

***How Supplied:*** **0.5, 1.0 and 2.0mg tablets.**

**Wyeth Laboratories**
Philadelphia, PA 19101

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# Why one benzodiazepine and not another?

Are you concerned about long-acting metabolites? Many clinicians, as well as pharmacologists, are beginning to draw attention to this problem (see New England Journal of Medicine, April 5, 1979).

In contrast to some older benzodiazepines, Ativan (lorazepam) does not give rise to long-lasting active metabolites. As with all benzodiazepines, you should follow the usual precautions concerning co-administration with other CNS depressants and warn your patients against operating dangerous machinery and motor vehicles.

However, it is noteworthy that Ativan showed no clinical evidence of accumulation even when given in high doses over periods up to 6 months. The half-life of free lorazepam is about 12 hours; steady-state serum levels are attained in 2-3 days. Comparable data for diazepam: 20-50 hours and at least 7-10 days. (The pharmacokinetic profile of a drug can define such characteristics as absorption, distribution, metabolism and elimination but cannot, at present, be directly related to its therapeutic effectiveness.)

Ativan has a convenient b.i.d. or t.i.d. dosage schedule; it is compatible with a long list of other medications and, of course, it is a highly effective anxiolytic agent, as established in numerous nationwide, double-blind, controlled evaluations in thousands of patients.

See important information on preceding page.

**Ativan**® (IV)
**for** (lorazepam)
**Anxiety**

# President's Page

## Medicine's Changing Image

When medical professional associations were first established the essential purpose was to provide a means of exchanging scientific information. Today that remains the primary reason for the existence of the Florida Medical Association.

The intervening years since 1874 when this Association was founded, have seen many times when for varying reasons the emphasis of Association activity had to be shifted. The emerging scientific approaches to public health problems in the late nineteenth and early twentieth centuries required the FMA to become an active participant in promoting preventive programs. It was during this period that physicians collectively and individually enjoyed their greatest public prestige.

Professional quality and credentialing occupied much of the organized medicine's efforts in the pre-World War I period. Doctors became anxious to protect the prestige they had earned by turning to government to add legal legitimacy to their professional qualification process. A degree of public protection was provided, but the process invited other fields of endeavor to pursue the same course. Today, sometimes the legal credential becomes a stamp of respectability acquired through the political process in the name of consumer protection.

With the emerging of specialization in the 20s and 30s the scientific activities of medical associations began to slip into the background. The quality of physician services, the ethics of physicians and the credentialing of specialists occupied organized medicine during this period. It should be noted here that a fifty year pattern of gradual withdrawal from purely public concerns to one of internal development took place.

After World War II the highly organized, super scientific and carefully specialized system of medicine began to spread its wares to the towns and villages across the landscape. The American people, with the help of television, began to see what was available in the big medical centers and everyone wanted something like it nearby. Thus began Hill-Burton hospitals, large hospital corporations, new medical schools, lowered immigration barriers, and hometown residency programs. When the market and technology forced prices up publically financed health care became part of the scene.

Organized medicine had lost control and could only thrash about at first trying to protect its credentialing and ethics system, and then later with the price demand challenge came financing schemes. Blue Shield and later a few HMO's emerged as a result of this reaction.

Out of the medical-Cadillac-in-every-garage syndrome grew a public demand to get it cheap or free. Government response has been nationalized delivery and regulatory programs with medicine now in the negative position of trying to protect a high quality system by political means. The result is the disappearance of nineteenth century prestige, a weakening of pre-World War I credentials, a practical enslavement of the 20s and 30s specialization and total destruction of free market practices.

FMA program emphasis must turn to generating preventive medical programs for all individuals. The process was started last year with Dr. Davenport's nutrition emphasis. Physicial fitness will take over where nutrition left off. In specific areas such as sports medicine, inmate care in jails and school nutrition, a vigorous public relations effort could serve to begin to restore a maligned and tarnished image.

Richard Hodes

---

# Take Time

**Take Time to think . . . It is the source of power.**
**Take Time to play . . . It is the secret of perpetual youth.**
**Take Time to read . . . It is the fountain of wisdom.**
**Take Time to pray . . . It is the greatest power on earth.**
**Take Time to love and be loved . . . It is a God-given privilege.**
**Take Time to be friendly . . . It is the road to happiness.**
**Take Time to laugh . . . It is the music of the soul.**
**Take Time to give . . . It is too short a day to be selfish.**
**Take Time to work . . . It is the price of success.**
**Take Time to do charity . . . It is the key to heaven.**

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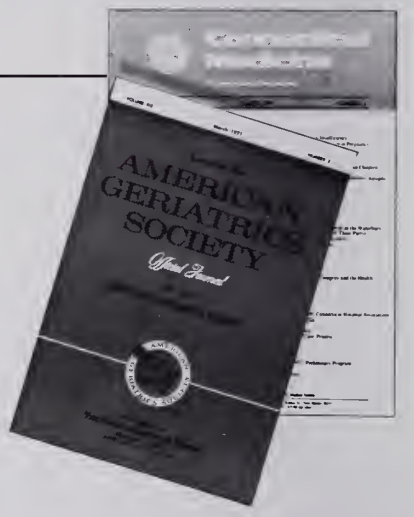


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Dosage: For continuous 24 hour therapy, one capsule after breakfast and one after supper.

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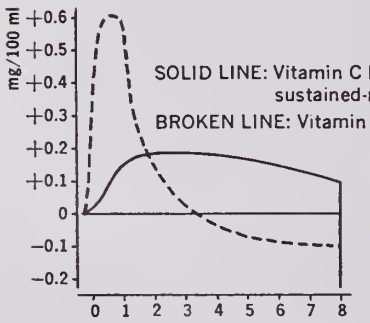


SOLID LINE: Vitamin C blood levels obtained with sustained-medication capsules (CEVI-BID).
BROKEN LINE: Vitamin C blood levels obtained with tablets.

*Comparison of ascorbic acid blood levels after administration of 1 gram of ascorbic acid in effervescent tablet form and 1 gram of CEVI-BID (2 capsules). *Adaptation

Samples on Request

**GERIATRIC PHARMACEUTICAL CORP.**
397 Jericho Turnpike, Floral Park, N.Y. 11001

1. Riccitelli, M.L.: Vitamin C Therapy in Geriatric Practice, J. Amer. Geriatrics Soc. 20:34, 1972.
2. Riccitelli, M.L.: Vitamin C—A Review. Conn. Med. 39:609, 1975

DEVELOPERS AND SUPPLIERS OF GER-O-FOAM • GAYSAL • B-C-BID

# Professional Liability Legal Update

## Discovery of Hospital Records Denied

After mediation, plaintiffs filed a circuit court action against the treating physicians generally alleging medical malpractice. The physicians moved to dismiss the complaint on the grounds that it failed to allege any specific deviation from the proper standard of care and, thus, did not state a cause of action for medical malpractice. The plaintiffs then attempted to subpoena hospital records indicating all surgeries performed at the hospital by the physicians and all records showing patients going from surgery to intensive care. The plaintiffs' motion to quash the subpoena was denied and the trial judge ordered the hospital to produce copies of the operative notes and intensive care records pertaining to all patients who underwent the back operation by these physicians. However, the trial court ordered that the names of all such patients be deleted or otherwise removed from any records that were produced. From that order, the petitioners filed a petition for appellate review. In reversing, the appellate court held that it was error for the trial court to order the production of medical records of persons not a party to the action. "The question of medical malpractice is whether or not the doctor, in treating the plaintiff, used a standard of care commensurate with that used in the community and that question can be answered by utilizing other methods of proof that the invasion into medical records of strangers." *Teperson v. Donato 371 So.2d 703 (Fla. 3rd DCA 1979).*

## Patient's Compensation Fund — Limitation of Judgements

This appeal involved the interpretation and application of the $100,000 limitation on liability in medical malpractice actions when the defendant health care provider has met the conditions set forth in the Medical Malpractice Reform Act. Appellate was Mercy Hospital, Inc., in Miami, defendant in a medical malpractice action. The appellees were the plaintiffs in that action who received a verdict for $125,000 and subsequently a judgement in that amount. On appeal, the question presented was whether a defendant health care provider is required to plead the Medical Malpractice Reform Act in order to receive the benefits of the limitation of the Act or whether compliance with the statute may be shown in limitation of the judgement after the entry of the jury verdict. It was held that the plaintiffs have the burden of making the Patient's Compensation Fund a party in any suit where recovery is sought against a health care provider in excess of $100,000, and that upon the plaintiffs' failure to make the fund a party, the trial court may, enter an order limiting the judgement in accordance with the Medical Malpractice Reform Act. *Mercy Hospital, Inc. v. Menendez 371 So.2d 1077 (Fla. 3d DCA 1979).*

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Prepared and submitted by John E. Thrasher, J.D., Vice President and Legal Counsel and Anthony J. McNicholas, III, J.D., Associate Legal Counsel, Professional Insurance Management Co. (PIMCO), Jacksonville, Florida.

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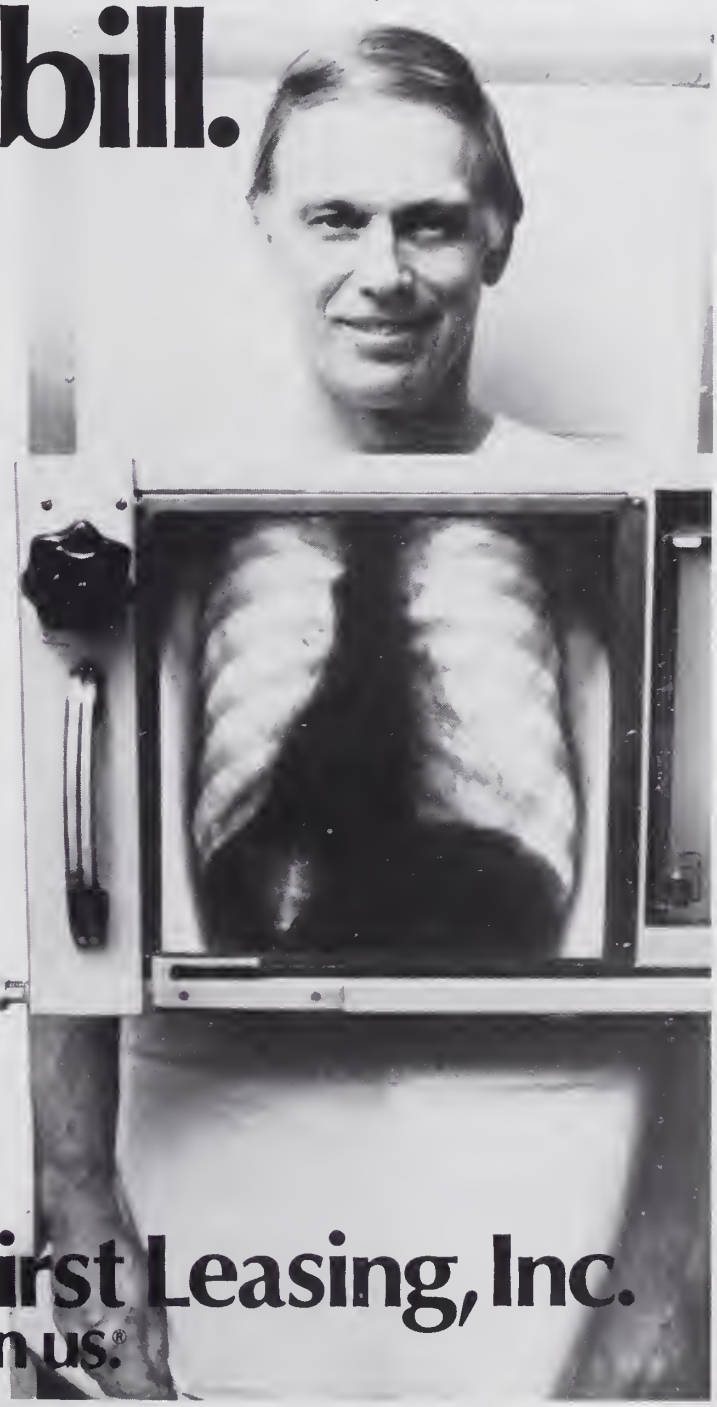
# It takes a healthy leasing company to pay a $5,000,000 hospital bill.



Recently a leading Florida hospital needed $5,000,000 worth of radiology equipment. So they went to the largest and fastest growing Florida-based leasing company, Southeast First Leasing, Inc.

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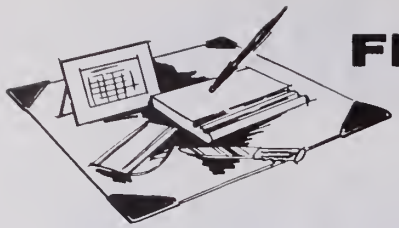

# FROM THE EDITOR'S DESK

## NEW YORK SUES AMA

Fourteen defendants, including the American Medical Association, have been sued by the State of New York, which charges that a "group boycott" has prevented chiropractors from effective competition and has caused New Yorkers to pay higher health care costs. Antitrust violations are alleged and an injunction and monetary penalties are sought in the action filed in the U.S. District Court in Brooklyn. The defendants are accused of prohibiting their members from referring patients to, and accepting referrals from, chiropractors. The suit seeks to remove restraints on teaching by chiropractors in medical schools and to permit chiropractors to hold hospital privileges. Among other defendants are: the American College of Surgeons, the American College of Physicians, the American Hospital Association and the American Osteopathic Association.

## AMA JAIL PROJECT

The Florida Medical Foundation has agreed to participate in the American Medical Association's Jail Project. The project will aim at improving medical and health care services in at least 10 local jails in Florida. The Foundation will help the jails implement AMA standards covering dental services, medical screenings, physical examinations, prescription practices and health record systems. Standards also requir a licensed physician to organize and supervise jail-based medical services; and the certification of all health care personnel.

## L.A.COUNTY JAIL

Responding to a request by a Federal Judge, an AMA survey team inspected health conditions at the Los Angeles County Central Men's Jail. Health care conditions at the jail are under review because of a lawsuit filed by the American Civil Liberties Union on behalf of several inmates. The team found that the jail was in full complian with 18 of the 41 AMA Standards for the Accreditation of Medical care and Health Services in Jails; in partial compliance with 11 standards; and does not measure up in the remaining 12.

## LAETRILE

The AMA has urged the Governor of New York to veto a bill on the use of the controversial substance, laetrile. The legislation would prohibit disciplinary action against a physician or pharmacist who prescribes, dispenses or administers laetrile to a patient with written consent. Responding to a request from the Governor's Office fo its opinion, the AMA pointed out that FDA has not found the substance to be safe and effective and that the drug may even be toxic.

## HOSPITAL COST CONTROL

The National Steering Committee of the Voluntary Effort says rising inflation and other factors are causing the program of cost control to fall short of its goal. In a letter to all hospitals, the VE urged tighter controls on employment by holding the number of employees at current levels through the end of the year.

## INFLATION

The general inflation rate for May was higher than the rate of increase for health care costs for the fourth month in a row. The all-items component of the Consumer Price Index rose 1.2%, compared with 0.5% for the medical care component and 0.7% for physicians' services.

## CURRENT PROCEDURAL TERMINOLOGY

The third update to the fourth edition of Physicians' Current Procedural Terminology has just been released. In addition to a variety of added or modified procedures, the update includes an extensive new section on urodynamics. The update can be ordered by using the prepaid mail card inside the back cover of CPT-4.

## PSRO TERMINATIONS

The Federal Government has come in for criticism for the manner in which it handled the termination of five Professional Standards Review Organizations (PSROs). "We cannot disagree with some termination decisions," said Harry S. Weeks, M.D., President of the American Association of Professional Standards Review Organizations, "but we must insist that all be treated by a process that is fair and equitable." Three PSROs--one each in Indiana, Tennessee and California --have been terminated, and one in Wyoming and one in New York have been notified their money would be cut off on July 1.

## CORPORATE VISITATION

The Medical and Chirurgical Faculty of Maryland and New York's Suffolk County Medical Society have begun localized versions of AMA's Corporate Visitation Program. Suffolk County met with five major local employers in May; Maryland scheduled a July 17 meeting with six employers in that state. Under the AMA program, meetings are held at the corporation's headquarters and feature discussion of employer's health care benefits packages and cost containment.

**The Editor**

# Dean's Page

# The Settling Froth

**William B. Deal, M.D.**

Medical school curricula are again the subject of debate!

It is refreshing that review of medical school curricula is both instructive and constructive. For decades virtually all medical schools in the nation had a classic two plus two system, that is, two years of preclinical or basic science instruction and two years of clinical instruction. In the late 1960s commensurate with the wave of student activism (not necessarily cause and effect), medical school faculties devised a variety of curricular options:

(a) Fast track — two years of undergraduate work and four years of medical school.
(b) Three or four years of undergraduate work and three years of medical school.
(c) Radical change in the four-year curricula:
  (1) Primarily self-instruction.
  (2) Computer-assisted instruction plus classical instruction.
  (3) Decreased preclinical and increased clinical instruction.
  (4) Combinations of the above.
(d) Combined M.D.-Ph.D. programs.
(e) Two and a half years of required work and 18 months elective time.
(f) Classical two plus two curricula.

The reasons for these changes are several:

(a) To educate more physicians in a shorter time (similar to the World War II years).
(b) A plethora of "educationists" on the job market.
(c) Federal government financial incentives.
(d) The ever reassessment of our role as educators in "looking for a better way."

While these changes occupied time and financial commitments, few asked the question, "What was wrong with being the product of a two plus two curriculum?" We all know the answer. However, with the burgeoning amount of new scientific information, the faculties began to search for better ways to convey the large amount of new information required of a future physician.

Recently, two more suggestions to correct this problem have been offered: (a) increasing medical school to five years and (b) requiring microanatomy, microbiology, and biochemistry as prerequisites for entrance to medical school. So in ten years we have advocated reducing curriculum time to now increasing it!

As with all experiments, some are successful and some are failures for a variety of reasons. The pendulum is swinging rapidly toward the middle of the spectrum at this time. However, faculties are concerned about "new disciplines" that are of great importance to medicine in the 1970s and 80s and are concerned about where these disciplines should be placed in the curriculum: human nutrition, human sexuality, adolescent medicine, geriatric medicine, cost containment, ethics, medical economics, and legal medicine. No one disagrees that these are important subjects to teach medical students, but the problem presented is whether these courses should be added and thereby displacing existing courses or whether they should be added at all. Difficult decisions are difficult.

In 1925 Sir Robert Hutchison in the *British Medical Journal* stated, "Those of us who have the duty of training the rising generation of doctors . . . must not inseminate the virgin minds of the young with the tares of our own fads. It is for this reason that it is easily possible for teaching to be 'too up to date.' It is always well, before handing the cup of knowledge to the young, to wait until the froth has settled."

Dr. Deal is Vice President for Health Affairs and Dean, University of Florida College of Medicine, Gainesville.

● Dr. Deal, University of Florida College of Medicine, Gainesville 32610.

The opinions stated on this page are those of the individual Deans and do not necessarily represent the policy of the FMA.

# A reminder

# ZYLOPRIM®

## (allopurinol)

100 and 300 mg scored Tablets

- inhibits uric acid formation
- helps prevent urate crystal depositions in synovia
- reduces risk of uric acid lithiasis

**INDICATIONS AND USE: This is not an innocuous drug and strict attention should be given to the indications for its use. Pending further investigation, its use in other hyperuricemic states is not indicated at this time.**

Zyloprim® (allopurinol) is intended for:

1. treatment of gout, either primary, or secondary to the hyperuricemia associated with blood dyscrasias and their therapy;
2. treatment of primary or secondary uric acid nephropathy, with or without accompanying symptoms of gout;
3. treatment of patients with recurrent uric acid stone formation;
4. prophylactic treatment to prevent tissue urate deposition, renal calculi, or uric acid nephropathy in patients with leukemias, lymphomas and malignancies who are receiving cancer chemotherapy with its resultant elevating effect on serum uric acid levels.

**CONTRAINDICATIONS:** Use in children with the exception of those with hyperuricemia secondary to malignancy. The drug should not be employed in nursing mothers.

**Patients who have developed a severe reaction to Zyloprim should not be restarted on the drug.**

**WARNINGS:** ZYLOPRIM SHOULD BE DISCONTINUED AT THE FIRST APPEARANCE OF SKIN RASH OR ANY SIGN OF ADVERSE REACTION. In some instances a skin rash may be followed by more severe hypersensitivity reactions such as exfoliative, urticarial and purpuric lesions as well as Stevens-Johnson syndrome (erythema multiforme) and very rarely a generalized vasculitis which may lead to irreversible hepatotoxicity and death.

A few cases of reversible clinical hepatotoxicity have been noted and in some patients asymptomatic rises in serum alkaline phosphatase or serum transaminase have been observed. Accordingly, periodic liver function tests should be performed during the early stages of therapy, particularly in patients with pre-existing liver disease.

Patients should be alerted to the need for due precautions when engaging in activities where alertness is mandatory.

Nevertheless, iron salts should not be given simultaneously with Zyloprim. This drug should not be administered to immediate relatives of patients with idiopathic hemochromatosis.

**In patients receiving Purinethol® (mercaptopurine) or Imuran® (azathioprine), the concomitant administration of 300-600 mg of Zyloprim per day will require a reduction in dose to approximately one-third to one-fourth of the usual dose of mercaptopurine or azathioprine. Subsequent adjustment of doses of Purinethol or Imuran should be made on the basis of therapeutic response and any toxic effects.**

*Usage in Pregnancy and Women of Childbearing Age.* Zyloprim® (allopurinol) should be used in pregnant women or women of childbearing age only if the potential benefits to the patient are weighed against the possible risk to the fetus.

**PRECAUTIONS:** Some investigators have reported an increase in acute attacks of gout during the early stages of allopurinol administration, even when normal or subnormal serum uric acid levels have been attained.

It has been reported that allopurinol prolongs the half-life of the anticoagulant, dicumarol. This interaction should be kept in mind when allopurinol is given to patients already on anticoagulant therapy, and the coagulation time should be reassessed.

A fluid intake sufficient to yield a daily urinary output of at least 2 liters and the maintenance of a neutral or, preferably, slightly alkaline urine are desirable to (1) avoid the theoretic possibility of formation of xanthine calculi under the influence of Zyloprim therapy and (2) help prevent renal precipitation of urates in patients receiving concomitant uricosuric agents.

Patients with impaired renal function require less drug and should be carefully observed during the early stages of Zyloprim administration and the drug withdrawn if increased abnormalities in renal function appear.

In patients with severely impaired renal function, or decreased urate clearance, the half-life of oxipurinol in the plasma is greatly prolonged. Therefore, a dose of 100 mg per day or 300 mg twice a week, or perhaps less, may be sufficient to maintain adequate xanthine oxidase inhibition to reduce serum urate levels. Such patients should be treated with the lowest effective dose, in order to minimize side effects.

Mild reticulocytosis has appeared in some patients.

As with all new agents, periodic determination of liver and kidney function and complete blood counts should be performed especially during the first few months of therapy.

**ADVERSE REACTIONS:**

*Dermatologic:* Because in some instances skin rash has been followed by severe hypersensitivity reactions, it is recommended that therapy be discontinued at the first sign of rash or other adverse reaction (see WARNINGS). Skin rash, usually maculopapular, is the adverse reaction most commonly reported.

Exfoliative, urticarial and purpuric lesions, Stevens-Johnson syndrome (erythema multiforme) and toxic epidermal necrolysis have also been reported.

A few cases of alopecia with and without accompanying dermatitis have been reported.

In some patients with a rash, restarting Zyloprim (allopurinol) therapy at lower doses has been accomplished without untoward incident.

*Gastrointestinal:* Nausea, vomiting, diarrhea, and intermittent abdominal pain have been reported.

*Vascular:* There have been rare instances of a generalized hypersensitivity vasculitis or necrotizing angiitis which have led to irreversible hepatotoxicity and death.

*Hematopoietic:* Agranulocytosis, anemia, aplastic anemia, bone marrow depression, leukopenia, pancytopenia and thrombocytopenia have been reported in patients, most of whom received concomitant drugs with potential for causing these reactions. Zyloprim® (allopurinol) has been neither implicated nor excluded as a cause of these reactions.

*Neurologic:* There have been a few reports of peripheral neuritis occurring while patients were taking Zyloprim. Drowsiness has also been reported in a few patients.

*Ophthalmic:* There have been a few reports of cataracts found in patients receiving Zyloprim. It is not known if the cataracts predated the Zyloprim therapy. "Toxic" cataracts were reported in one patient who also received an anti-inflammatory agent; again, the time of onset is unknown. In a group of patients followed by Gutman and Yü for up to five years on Zyloprim therapy, no evidence of ophthalmologic effect attributable to Zyloprim was reported.

*Drug Idiosyncrasy:* Symptoms suggestive of drug idiosyncrasy have been reported in a few patients. This was characterized by fever, chills, leukopenia or leukocytosis, eosinophilia, arthralgias, skin rash, pruritus, nausea and vomiting.

**OVERDOSAGE:** Massive overdosing, or acute poisoning, by Zyloprim has not been reported.

**HOW SUPPLIED:** 100 mg (white) scored tablets, bottles of 100 and 1000; 300 mg (peach) scored tablets, bottles of 30, 100 and 500. Unit dose packs for each strength also available.

*Complete information available from your local B. W. Co. Representative or from Professional Services Department PML.*

U.S. Patent No. 3,624,205 (Use Patent)

Wellcome

**Burroughs Wellcome Co.**
Research Triangle Park
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# The predictability of an IV infusio

Until Theo-Dur there was only one method for obtaining virtually ideal therapeutic theophylli serum levels—IV infusion.

Theo-Dur provides the therapeutic benefits of I infusion in a tablet:

- a constant rate of theophylline absorption
- linear serum concentrations within the *therapeutic window*
- q12h dosage

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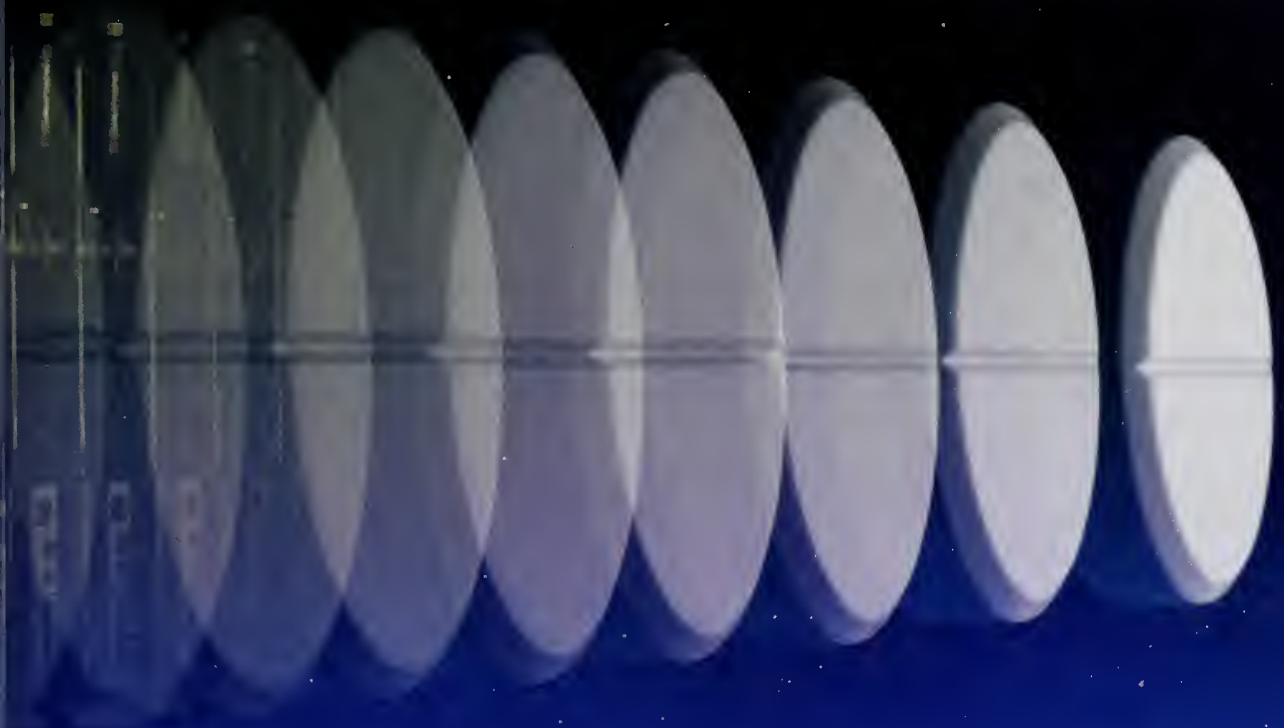
..in a tablet

# THEO-DUR™

## Zero-Order Anhydrous Theophylline

The only formulation with q12h dosing and zero-order absorption



### ZERO-ORDER dc/dt=K™
**(constant rate absorption by GI infusion)**

...assures programmed availability of a theophylline dose, hour by hour, for each individual, regardless of clearance rate. Thus, Theo-Dur dosage can be individualized to provide optimal results for each patient.

**Theo-Dur "locks in" on the therapeutic window.** Theophylline serum concentrations between 10 and 20 mcg/ml provide the *therapeutic window* within which Theo-Dur consistently provides optimal therapeutic effect for a full 12-hour interval. Blood levels above 20 mcg/ml may cause toxicity...blood levels below 10 mcg/ml may be ineffective.

**Three strengths for flexible dosage.** Dosage can be easily titrated for maximum therapeutic effect. Scored tablets in 100 mg, 200 mg and 300 mg strengths permit accurate dosage adjustment in as little as 50 mg increments. Patients presently on theophylline can be easily converted to Theo-Dur by dividing the daily anhydrous theophylline intake into two equal doses administered at 12-hour intervals.

**Dosage and Administration:** Average initial dose is 100 mg to 300 mg q12h depending on the age and weight of the patient and the severity of the disease. See package insert for full prescribing information.

*See following page for a brief summary of prescribing information.*

**KEY PHARMACEUTICALS, INC.**
Miami, Florida 33169 (USA)

# THEO-DUR™

## Zero-Order Anhydrous Theophylline

### Sustained Action Tablets

**Description:** THEO-DUR Sustained Action Tablets contain anhydrous theophylline, with no color additives.

**Actions:** The pharmacologic actions of theophylline are as a bronchodilator, pulmonary vasodilator and smooth muscle relaxant since the drug directly relaxes the smooth muscle of the bronchial airways and pulmonary blood vessels. Theophylline also possesses other actions typical of the xanthine derivatives: coronary vasodilator, diuretic, cardiac stimulant, cerebral stimulant and skeletal muscle stimulant. The actions of theophylline may be mediated through inhibition of phosphodiesterase and a resultant increase in intracellular cyclic AMP which could mediate smooth muscle relaxation.

**Indications:** Symptomatic relief and/or prevention of asthma and reversible bronchospasm associated with chronic bronchitis and emphysema.

**Contraindications:** THEO-DUR is contraindicated in individuals who have shown hypersensitivity to any of its components or xanthine derivatives.

**Warnings:** Excessive theophylline doses may be associated with toxicity; serum theophylline levels should be monitored to assure maximum benefit with minimum risk. Incidence of toxicity increases at serum levels greater than 20 mcg/ml. High blood levels of theophylline resulting from conventional doses are correlated with clinical manifestations of toxicity in: patients with lowered body plasma clearances, patients with liver dysfunction or chronic obstructive lung disease, and patients who are older than 55 years of age, particularly males. There are often no early signs of less serious theophylline toxicity such as nausea and restlessness, which may appear in up to 50% of patients prior to onset of convulsions. Ventricular arrhythmias or seizures may be the first signs of toxicity. Many patients who have higher theophylline serum levels exhibit a tachycardia. Theophylline products may worsen pre-existing arrhythmias.

**Usage in Pregnancy:** Safe use in pregnancy has not been established relative to possible adverse effects on fetal development, but neither have adverse effects on fetal development been established. This is, unfortunately, true for most anti-asthmatic medications. Therefore, use of theophylline in pregnant women should be balanced against the risk of uncontrolled asthma.

**Precautions:** THEO-DUR TABLETS SHOULD NOT BE CHEWED OR CRUSHED. Theophyllines should not be administered concurrently with other xanthine medications. It should be used with caution in patients with severe cardiac disease, severe hypoxemia, hypertension, hyperthyroidism, acute myocardial injury, cor pulmonale, congestive heart failure, liver disease and in the elderly, particularly males, and in neonates. Great caution should be used in giving theophylline to patients in congestive heart failure since these patients show markedly prolonged theophylline blood level curves. Use theophylline cautiously in patients with history of peptic ulcer. Theophylline may occasionally act as a local irritant to GI tract although gastrointestinal symptoms are more commonly central and associated with high serum concentrations above 20 mcg/ml.

**Adverse Reactions:** The most consistent adverse reactions are usually due to overdose and are:

Gastrointestinal: Nausea, vomiting, epigastric pain, hematemesis, diarrhea.

Central Nervous System: Headaches, irritability, restlessness, insomnia, reflex hyperexcitability, muscle twitching, clonic and tonic generalized convulsions.

Cardiovascular: Palpitation, tachycardia, extrasystoles, flushing, hypotension, circulatory failure, life threatening ventricular arrhythmias.

Respiratory: Tachypnea.

Renal: Albuminuria, increased excretion of renal tubular cells and red blood cells; potentiation of diuresis.

Others: Hyperglycemia and inappropriate ADH syndrome.

**How Supplied:** THEO-DUR 100 mg, 200 mg and 300 mg sustained action scored tablets are available in bottles of 100 and 1000; and in unit dose packages of 100.

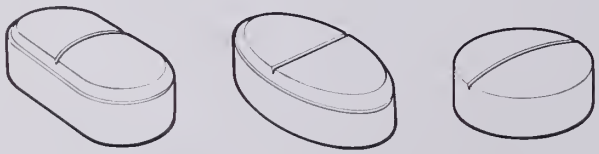
**Caution:** FEDERAL LAW PROHIBITS DISPENSING WITHOUT A PRESCRIPTION.

*For full prescribing information, see package insert.*

# ZERO-ORDER

## dc/dt=K™

## (Constant rate absorption by GI infusion)



300 mg 200 mg 100 mg

KEY PHARMACEUTICALS, INC.
Miami, Florida 33169 (USA)



# Quinamm™

**AVAILABLE ONLY ON PRESCRIPTION**

**Brief Summary**

**INDICATIONS:** For the prevention and treatment of nocturnal recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis, and static foot deformities.

**CONTRAINDICATIONS:** Because of the quinine content, Quinamm is contraindicated in women of childbearing potential, in pregnancy, in patients with known quinine sensitivity, and in patients with glucose-6-phosphate dehydrogenase deficiency. Hemolysis (with the potential for hemolytic anemia) has been associated with a G-6-PD deficiency in patients taking quinine.

**PRECAUTIONS:** Thrombocytopenic purpura may follow the administration of quinine in highly sensitive patients. Recovery will follow withdrawal of the medication.
Cinchona alkaloids, including quinine, have the potential to depress the hepatic enzyme system that synthesizes the vitamin K-dependent factors. The resulting hypoprothrombinemic effect may enhance the action of warfarin and other oral anticoagulants.

**ADVERSE REACTIONS:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. If ringing in the ears, deafness, skin rash, or visual disturbances occur, the drug should be discontinued.

**DOSAGE AND ADMINISTRATION:**
1 tablet upon retiring. When necessary, 1 additional tablet may be taken following the evening meal.

Product Information as of September, 1977

U.S. Patent 2,985,558

# Merrell

MERRELL-NATIONAL LABORATORIES Inc.
Cayey, Puerto Rico 00633

*Direct Medical Inquiries to:*
MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

Licensor of Merrell®

# Quinamm™

each tablet contains quinine sulfate 260 mg., aminophylline 195 mg.

## specific therapy for painful night leg cramps

Nocturnal recumbency leg muscle cramping is frequently an unwelcome bedfellow for many patients—especially those with arthritis, diabetes or peripheral vascular disease . . . consider Quinamm . . . simple, convenient dosage—usually just one tablet at bedtime . . . can provide restful, welcome sleep without night leg cramps.

See opposite page for prescribing information.

# Does it influence your choice of a peripheral/cerebral vasodilator*?

- Vasodilan—compatible with coexisting diseases
- Vasodilan—compatible with concomitant therapy
- Vasodilan—compatible with your total regimen for vascular insufficiency

***Indications:** Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, the FDA has classified the indications as follows:

Possibly Effective:

1. For the relief of symptoms associated with cerebral vascular insufficiency
2. In peripheral vascular disease of arteriosclerosis obliterans, thromboangiitis obliterans (Buerger's Disease) and Raynaud's disease.

Final classification of the less-than-effective indications requires further investigation.

**Composition:** Vasodilan tablets, isoxsuprine HCl, 10 mg. and 20 mg.
Vasodilan injection, isoxsuprine HCl, 5 mg., per ml.

**Dosage and Administration:** Oral: 10 to 20 mg., three or four times daily.
Intramuscular: 5 to 10 mg. (1 or 2 ml.) two or three times daily. Intramuscular administration may be used initially in severe or acute conditions.

**Contraindications and Cautions:** There are no known contraindications to ora use when administered in recommended doses. Should not be given immediatel postpartum or in the presence of arterial bleeding.

Parenteral administration is not recommended in the presence of hypotension o tachycardia.

Intravenous administration should not be given because of increased likelihood of side effects.

**Adverse Reactions:** On rare occasions oral administration of the drug has been associated in time with the occurrence of hypotension, tachycardia, nausea, vomiting, dizziness, abdominal distress, and severe rash. If rash appears the drug should be discontinued.

Although available evidence suggests a temporal association of these reactions with isoxsuprine, a causal relationship can be neither confirmed nor refuted.

Administration of single dose of 10 mg. intramuscularly may result in hypotension and tachycardia. These symptoms are more pronounced in higher doses. For these reasons single intramuscular doses exceeding 10 mg. are not recommended. Repeated administration of 5 to 10 mg. intramuscularly at suitable intervals may be employed.

**Supplied:** Tablets, 10 mg., bottles of 100, 1000, 5000 and Unit Dose; Tablets, 20 mg., bottles of 100, 500, 1000, 5000 and Unit Dose; Injection, 10 mg. per 2 ml. ampul, box of six 2 ml. ampuls.

U.S. Pat. No. 3,056,836

# VASODILAN®
## (ISOXSUPRINE HCl)
**20-mg tablets**

**Mead Johnson** PHARMACEUTICAL DIVISION

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THE JOURNAL OF THE FLORIDA MEDICAL ASSOCIATION INC
SEPTEMBER 1979 • VOL 64 • NO 9

# Hemoccult Screening For Colorectal Cancer

## An Impact Study on Sarasota, Florida

S. Philip Bralow, M.D. and J. Kopel

**Abstract: A screening program for the early detection of colorectal cancer using Hemoccult II slides was carried out in Sarasota County. Public response was greater than anticipated and 3,798 individuals over the age of 40 participated. The compliance rate was 79% and 10.9% of the returned specimens on an unrestricted diet were positive.**

**Participants with positive stools were rechecked on meat-free high roughage diets and 180 studies were still positive. Definite pathology was found in 73 people; diverticular disease 47%, hemorrhoidal bleeding 29%, polyps 15%, and colorectal cancer in 9%. All cancers were early, Dukes A or B, with an anticipated cure rate of 80%. The incidence can be expressed as 184 per 100,000 or five times the anticipated rate. The cost per cancer found was $2395 excluding physicians fees.**

In 1978 an estimated 102,000 individuals in the United States developed colorectal cancer and approximately 52,000 died. In only 40% of cases treated surgically the malignancy was limited to the bowel wall (Dukes A, B),[1] reflecting an anticipated five-year survival rate between 80 and 90%.[2] At present, the overall survival rate is below 40%.[3]

In 1977 a group appointed by the Florida Division of the American Cancer Society studied the feasibility of early diagnosis of colorectal cancer using the Hemoccult slide technique described by Greegor and others.[4,9] A county-wide screening program in Sarasota, where 60% of the population is over 40 years of age, was initiated. Community resources and volunteer help were supplemented by funds made available from the Florida Division of the American Cancer Society and the Manasota Medical Foundation. Participation in the program was free to individuals over age 40.

Public awareness, patient compliance, and physician cooperation were encouraged through the newspapers, radio, television, and posters. Efforts focussed on a seven-day Sarasota County Colorectal Detection Week. All three hospitals in the county and the oncology center served as distribution centers; dispensing the kits, instructing the participants, and collecting the specimens and questionnaires.

Three hundred local physicians and health professionals attended a "Symposium in Large Bowel Cancer; Early Diagnosis and Screening Programs" two days prior to Colorectal Cancer Detection Week. Nationally prominent scientists and local physicians discussed testing programs, emphasizing the cost-benefit ratios. The new Hemoccult II slide packets were given to participants, along with instructions, questionnaires, notification letters, and suggested diagnostic flow sheets for positive-screen patients. (Fig. 1).

This report describes the impact of Colorectal Cancer Detection Week in Sarasota County on professional and public awareness as well as on detection rate of early cancer.

### Method

Four distribution centers were manned by volunteers from 10 a.m. to 2 p.m. daily during the focus week. Public response overwhelmed the 150 volunteers, who worked more than 600 hours. Four ACS salaried employees worked more than 160 hours. Some confusion resulted.

The meat-free, high roughage diet described in the Hemoccult II packets was recommended but not mandatory for participation. The meat-free diet is still controversial.[10] Winawer states that a standardized

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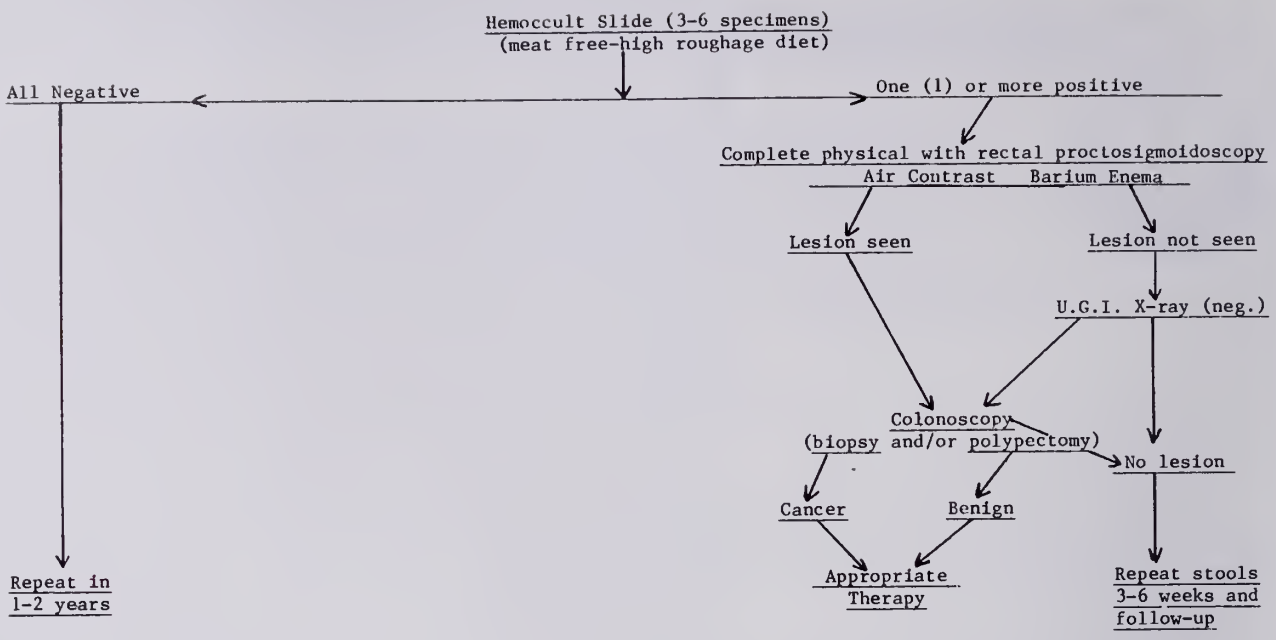


**Fig. 1.—Suggested flow sheet for asymptomatic patients over 40 years of age.**

meat-free diet is needed to ensure the cost effectiveness of the program,[14] while Ostrow found no difference in the false positivity rate of hospitalized patients using normal amount of meat.[10] Greegor, in 1967,[4] commented that normal meat diets did not contain sufficient blood to interfere with the test but later revised this opinion to favor meat-free, high roughage diets.[5] We followed the methods of Miller and Knight[11] and Glober and Peskow,[7] where all patients on a regular diet with a positive hemoccult screen were retested after following a meat-free diet. Ascorbic acid, which interferes with peroxidase reaction of the hemoccult test, was eliminated.[12]

The Hemoccult II slides were tested by rehydration to avoid loss of sensitivity by standing and causing an increased false negative result.[13] Winawer recommended rehydration initially but later found the false positive rate to increase from 3 to 5%.[14] Rehydration has since been discontinued.

Test results were sent to all participants by the American Cancer Society with a letter stating that a positive screen was not a definitive diagnosis of cancer and suggesting further study. If requested, the patient's physician was notified but only 25% of those with positive stools wanted their physicians notified. Participants with a positive screen received another questionnaire six months later requesting follow-up information. Their physicians received a more detailed questionnaire. Forty percent of participants and 74% of physicians responded.

## Results

Public response to Colorectal Cancer Detection Week was overwhelming. Within three days, Hemoccult II slides in the county were exhausted and additional supplies were flown in. During the week 3,798 individuals over age 40 were tested (Fig. 2). The compliance rate of 79% was comparable to programs in similar populations.[6,7,9,11] Community programs in indigent areas sponsored by the American Cancer Society, reported compliance as low as 20%.

Positive hemoccult tests of patients on a meat-free diet have ranged from 1 to 5% to as high as 25% on a normal diet.[7] In this study 10.9% of those patients on an unrestricted diet returned positive tests. One third of those with positive stools did not respond to follow-up questionnaires. Thirty-eight patients were rechecked after switching to a meat-free diet and stools were negative. (Table 1) No follow-up studies were done in this group (approximately 12%).

Of 180 individuals with persistent occult blood in the stool, 21 refused further studies despite consulting their own physician. Forty eight percent of persons with persistent occult blood in their stools had negative follow-up studies. More than half were not completely studied in accordance with the flow sheet (Fig. 1). Sixteen participants with positive stools were studied

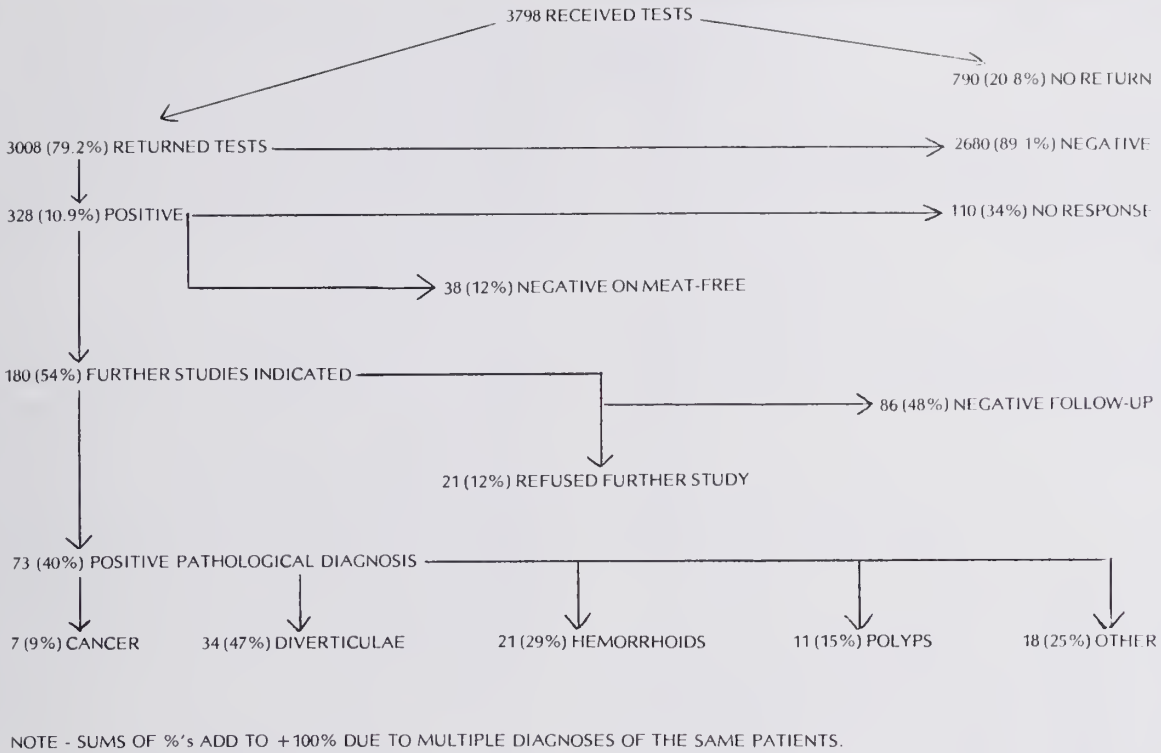


**Fig. 2.—Results, hemoccult screening Project: Sarasota County**

only by physical and possible rectal examination. Of these, three were found to have bleeding hemorrhoids (Table 2). The site of the bleeding was identified by sigmoidoscopy in 35% of patients with positive lesions, only 13.5% of those with positive stools were tested. In 14 persons barium x-ray with full colon technique was the only study made and yielded 29% of the lesions found. Sigmoidoscopy combined with air contrast barium enema accurately detected 52% of the lesions (Table 2). All the cancers of the colon were diagnosed by this combination. Colonoscopy, performed in 11 patients, detected the majority of the colonic polyps. Many physicians considered colonoscopy too costly in asymptomatic patients with negative x-rays.

Of the 3,798 in the program, 73 were identified as having organic lesions. Dropouts (30%) included individuals who did not respond to questionnaires, or failed to see a physician, or refused studies prescribed by a physician. Most common diagnoses were diverticular disease (47%) and hemorrhoidal bleeding (29%). Polyps were found in 15% but only 6% of the total group had colonoscopy. Cancers were found in seven individuals or 9% of those with proven diagnoses (Fig. 2). This yield

**Table 1.—Studies Performed on Patients with Positive Slides.**

| | Number | Percent |
|---|---|---|
| Repeat on Meat-free Diet | 38 | 19.0 |
| Sigmoidoscopy Alone | 27 | 13.5 |
| Barium Enema Alone | 14 | 7.0 |
| Sigmoidoscopy & Barium Enema | 105 | 52.5 |
| Colonoscopy | 11 | 6.1 |
| No Further Studies | 16 | 8.0 |

**Table 2.—Diagnostic Yield of Various Studies.**

| Studies | No Diagnosis | | Positive Diagnosis | |
|---|---|---|---|---|
| | Number | Percent | Number | Percent |
| Physical Examination +1—Rectal | 13 | 81 | 3 | 19 |
| Sigmoidoscopy | 20 | 65 | 7 | 35 |
| Barium Enema | 10 | 71 | 4 | 29 |
| Sigmoidoscopy & Barium Enema | 50 | 48 | 55 | 52 |
| Colonoscopy | 1 | 1 | 10 | 99 |

Table 3.—Studies Performed on Patients with Positive Slides.

| | Number | Estimated* Total Cost |
|---|---|---|
| Inital Screen | 3,798 | $ 3,798.00 |
| Repeat on Meat-Free Diet | 38 | 190.00 |
| Sigmoidoscopy Alone | 27 | 945.00 |
| Barium Enema Alone | 14 | 910.00 |
| Sigmoidoscopy & Barium Enema | 105 | 6,825.00 |
| Colonoscopy | 11 | 4,000.00 |
| | | $16,768.00 |
| Cost per cancer patient (7) = | | $ 2,395.00 |

*Excluding physician's fees

reflects a rate of 184 per 100,000 population compared to the national incidence estimated by Seidman as 34.4 to 45.1 per 100,000 population.[15] This five-fold increase in diagnosis following a hemoccult screening program has been observed by others.[6,7,9,11] The seven individuals in whom colorectal cancer was diagnosed had localized lesions classified as Dukes A or B, carrying an anticipated cure rate of 80%. The cost for each cancer found was $2,395 excluding physician's fees (Table 3).

The high dropout rate in the program prompted a six-month review of all cases of colorectal cancer admitted to Sarasota County hospitals. Fifty-three patients with colorectal cancer were identified, including the seven individuals found in the ACS screening program. None of these patients had been reported negative during the testing program. One patient reported negative on the screen had polyps. A patient with a Dukes D lesion had two negative hemoccult stool examinations during a regular examination by her physician. Nine cancer patients were diagnosed following a positive hemoccult stool test during a routine office examination. All patients diagnosed as a result of the screen were localized and were either Dukes A or B while 20 asymptomatic patients undergoing colectomy during this period had Dukes C or D lesions.

## Discussion

A successful screening program for colorectal cancer depends upon educated compliance of both the lay population and health professionals. A single screening program in an open community is difficult to compare with a localized institutional study having the advantages of well-motivated participants and full-time professionals with well-defined job responsibilities. An institutional program can standardize the studies of individuals with positive stools without increasing false positive or negative results. Cost effectiveness of such programs can be determined accurately. Current studies at Memorial Sloan-Kettering Cancer Center Preventive Medicine Institute — Strang Clinic[9,14,16,17] may lead to a general acceptance of the hemoccult screening technique and to a decline in the mortality from colorectal cancer.

Long-term follow-up for patients with negative stools in a community program is difficult. Detection rate of cancer of the colon is five times greater than the current norm and localized lesions with an 80% five-year survival time after surgery are found. This finding alone makes the program effective. Screening can also identify patients with polypoid lesions who have a high risk for colonic cancer. Colonoscopy and polypectomy can keep these individuals polyp free and reduce the cancer incidence.[24] In a polyp-free colon, colonoscopy need only be repeated every two years.[9]

Sigmoidoscopy as a screening procedure for asymptomatic individuals yields 1.5 lesions per 1,000 examinations.[18] Fifty five percent of colon cancers occur within reach of the sigmoidoscope.[19] Cost for each cancer case detected in now more than $20,000 ($25 per examination) instead of the $2,395 in our program. Patient acceptance is 50% whereas with hemoccult slides it is 80%.

Fiberoptic instruments simplify the diagnosis of polyps and other occult lesions of the colon. Examination using a 60 cm flexible sigmoidoscope is an office procedure[20] and may find three times the lesions found by routine sigmoidoscopy. The cecum can be reached in more than 80% of colonoscopic examinations by an experienced endoscopist. Full colonoscopy should be done in patients with positive stools and negative barium x-rays. Teague et al[21] found lesions in 41% of patients with rectal bleeding when the x-ray was negative. Because the physicians relied on the barium enema alone, only 11 patients in our program were studied by colonoscopy. Full column barium enemas may miss as many as 25% of gross tumors demonstrable by an air contrast examination. An air contrast study requires meticulous bowel cleansing as does a colonoscopic examination. According to Miller,[22] a careful air contrast barium enema will detect 98% of polyps larger than 1 cm and 78% of polyps less than 1 cm.

Tests not using the peroxidase reaction and specific for human blood are needed. Songster[23] recently developed an immunochemical test 10 to 20 times more sensitive than the hemoccult slide which may be able to differentiate blood from the upper gastrointestinal tract from that of the lower tract.

## Summary

A screening program for colorectal cancer can be successfully carried out on a community-wide basis. Early cancer can be detected at a rate five times greater than previously diagnosed according to the literature.[15] Patient compliance is excellent initially, but only 30% responded to follow-up questionnaires. Physician compliance was excellent with 74% responding to the questionnaire but studying only 50% of the positive patients completely. No doubt more lesions would have been found if these patients had complete studies. Follow-up examination and cost-benefit ratio evaluation studies are best performed by a well-controlled study at a single institution.

The hemoccult slide test wtih six specimens over a three-day period with the patient on a proper diet is the least expensive and most effective screening method for detecting patients over 40 who need a complete gastrointestinal evaluation. A single stool, digitally procurred, gives no assurance, even when negative, as bleeding in far advanced cancer may be intermittent and missed.



## Acknowledgement

We are indebted to the volunteer group of the Sarasota Unit, American Cancer Society and the volunteer associations of Sarasota Memorial Hospital, Venice Hospital and Doctors Hospital.


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# Printing Error Noted in 1975 RVS

**The FMA Committee on Relative Value Studies has noted a printing error in the *1975 Florida Relative Value Studies* and has asked that the following correction be published in *The Journal:***

**"ERRATA — Procedure Number 15100 on Page 56 in the *1975 Florida Relative Value Studies* should reflect "45" followup days and not "0" as printed in the manual. Please make this correction in your *1975 Florida Relative Value Studies.*"**

# Treatment Schedule Revised for Gonorrhea Florida's Leading Communicable Disease

E. Charlton Prather, M.D.
and Jack E. Wroten

The Center for Disease Control's revised treatment schedule for patients with uncomplicated gonococcal infection cautions physicians to use no less than the recommended dosage of antibiotics. Most infection recurring after treatment is due to reinfection, not treatment failure. A cause of failure may be penicillinase-producing *Neisseria gonorrhoeae* for which CDC suggests spectinomycin.

The lessening of absolute preference among four drug regimens — aqueous procaine penicillin G (APPG), tetracycline, ampicillin, and amoxicillin — is the major change from the 1974 schedule which listed APPG as the principle drug with ampicillin, tetracycline, and spectinomycin as much less desirable alternative regimens.

For infections in men and women, the schedule recommends APPG 4.8 million units intramuscularly with 1.0 gm probenecid orally, or tetracycline hydrochloride 0.5 gm orally 4 times per day for 5 days for a total dosage of 10 gm, or ampicillin 3.5 gm or amoxicillin 3.0 gm either with 1.0 probenecid orally.

CDC warns that tetracycline other than tetracycline hydrochloride is not more effective and that all tetracyclines are ineffective as single dose therapy. It also indicates that there is evidence the ampicillin and amoxicillin regimens are slightly less effective in controlling the gonococcal infection than the other recommended regimens.

Patients allergic to penicillin or probenecid should be treated with tetracycline orally. Those unable to tolerate tetracycline may be given spectinomycin hydrochloride 2.0 gm intramuscularly in one injection.

Single dose treatment with penicillin is preferred in patients unlikely to complete the multiple dose tetracycline regimen and in men with anorectal infection. The tetracycline regimen results in fewer cases of post-gonococcal urethritis in men and may eliminate coexisting chlamydial infection in men and women. Ampicillin and spectinomycin are not effective for pharyngeal infection.

CDC indicates that excepting spectinomycin the drug regimens are likely to cure incubating syphilis but suggests a serologic test at the time of diagnosis. Patients with coexisting syphilis and gonorrhea should have treatment appropriate to the stage of syphilis.

Release of the revised treatment schedule focuses again the attention of all physicians upon gonorrhea — the leading communicable disease in Florida and the nation. Last year 60,382 cases were reported to the Venereal Disease Control Program of the state Department of Health and Rehabilitative Services in Jacksonville, a 2.6% increase over 1977. Public health clinics reported 89.2% of cases and private physicians 10.8%. The rate of 674 per 100,000 population is the 7th highest in the nation.

Last year's 458,242 cultures for gonorrhea obtained in the screening program for asymptomatic females produced a positivity rate of 5.1%. Since this program was begun six years ago, more than 2.6 million cultures have been performed by health department clinics, private physicians and other health care providers. The program includes not only screening but rescreening of men and women patients three to five days following treatment and again one month following a negative test-of-cure result. It also involves counseling patients to refer sex contacts for treatment; activities among hospital emergency room staffs encouraging them to establish an acute salpingitis — gonococcal pelvic inflammatory disease program, and information and education.

Hospital staffs in several major Florida cities have begun programs of management for patients presenting with symptoms of acute salpingitis and other inflammatory conditions of the pelvic region. As a cooperative endeavor with the local health department, these hospitals are testing for *N. gonorrhoeae* by culture in emergency rooms, sharing laboratory expertise, and

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directing patients to public health clinics as deemed necessary.

The Venereal Disease Control Program requests that physicians in private practice continue their efforts to control and reduce the incidence of gonorrhea. It is vital that adequate treatment be administered to patients, that they be counseled to refer their sex contacts for treatment, and that follow-up care include a test of cure within three to five days.

Further information about gonorrhea and other sexually transmissible diseases in your particular area may be obtained from the Venereal Disease Control Program regional supervisor: Gerald Dunleavy, Ft. Lauderdale 305/525-2741; Richard Akin, Ft. Myers 813/332-1747; Willie Greene, Jacksonville 904/633-3620; Ron Cremo, Miami 305/325-2550; Charles Archer, Ocala 904/629-0137; Edward Carson, Orlando 305/420-3326; Phillip Moncrief, Pensacola 904/438-8571; Richard Hosking, St. Petersburg 813/894-1181; Robert Wilkinson, Tallahassee 904/576-1211; William Rovira, Tampa 813/272-1747; Thomas Burns, West Palm Beach 305/837-3090.

- Dr. Prather, 2639 North Monroe Street, Suite 200-A, Tallahassee 32303.

These recommendations were established after deliberation with these therapy consultants:

Harold C. Neu, M.D., College of Physicians and Surgeons, Columbia University; Erwin H. Braff, M.D., San Francisco Department of Public Health; Gary Cunningham, M.D., Southwestern Medical School, Dallas; King K. Holmes, M.D., Ph.D., USPHS Hospital, Seattle; Franklyn Judson, M.D., Department of Health and Hospitals, Denver; William McCormack, M.D., State Laboratory Institute, Boston; Edwin M. Mears Jr., M.D., New England Medical Center, Boston; John D. Nelson, M.D., Southwestern Medical School, Dallas; Morton Nelson, M.D., Orange County, California; Suzanne M. Sgroi, M.D., Suffield, Conn.; Frederick Sparling, M.D., School of Medicine, The University of North Carolina, Chapel Hill; Lt. Col. Edmund C. Tramont, Walter Reed Army Medical Center, Washington, D.C.

# Florida Department of Health and Rehabilitative Services Venereal Disease Control Program

## GONORRHEA

### CDC Recommended Treatment Schedules, 1978

Note: Physicians are cautioned to use no less than the recommended dosages of antibiotics.

**Uncomplicated Gonococcal Infections in Men and Women**

**Drug Regimens of Choice**

Aqueous procaine penicillin G (APPG) 4.8 million units intramuscularly with 1.0 g of probenecid by mouth, or

Tetracycline hydrocholoride* 0.5 g by mouth 4 times per day for 5 days (total dosage 10.0 g). Other tetracyclines are not more effective than tetracycline hydrochloride. All tetracyclines are ineffective as single dose therapy, or

Ampicillin 3.5 g or Amoxicillin 3.0 g, either with 1 g probenecid by mouth. There is evidence that these regimens are slightly less effective than the other recommended regimens.

Patients who are allergic to the penicillins or probenecid should be treated with oral tetracycline as above. Patients who cannot tolerate tetracycline may be treated with spectinomycin hydrochloride 2.0 g intramuscularly in 1 injection.

**Special Considerations**

—Single dose treatment is preferred in patients who are unlikely to complete the multiple dose tetracycline regimen.
—The APPG regimen is preferred in men with anorectal infection.
—Ampicillin and spectinomycin are not effective for pharyngeal infection.
—Tetracycline treatment results in fewer cases of postgonococcal urethritis in men.
—Tetracycline may eliminate coexisting chlamydial infections in men and women.
—Patients with incubating syphilis (seronegative, without clinical signs of syphilis) are likely to be cured by the above regimens with the exception of spectinomycin. All patients should have a serologic test for syphilis at the time of diagnosis.
—Patients with gonorrhea who also have syphilis should be given additional treatment appropriate to the stage of syphilis.

**Treatment of Sexual Partners**

Men and women exposed to gonorrhea should be examined, cultured and treated at once with one of the above regimens.

**Followup**

Followup cultures should be obtained from the infected site(s) 3 to 7 days after completion of treatment. Cultures should be obtained from the anal canal of all women who have been treated for gonorrhea.

**Treatment Failures**

The patient who fails therapy with penicillin, ampicillin, amoxicillin, or tetracycline should be treated with 2.0 g of spectinomycin intramuscularly.

Most recurrent infection after treatment with the recommended schedules is due to reinfection and indicates a need for improved contact tracing and patient education. Since infection by penicillinase (B-lactamase)-producing *Neisseria gonorrhoeae* is a cause of treatment failure, posttreatment isolates should be tested for penicillinase production.

*Food and some dairy products interfere with absorption. Oral forms of tetracycline should be given one hour before or two hours after meals.

### Not Recommended

Although long-acting forms of penicillin (such as benzathine penicillin G) are effective in syphilotherapy, they have NO place in the treatment of gonorrhea. Oral penicillin preparations such as penicillin V are not recommended for the treatment of gonococcal infection.

## POSTGONOCOCCAL URETHRITIS

Tetracycline 0.5 g 4 times a day by mouth, for 7 days.

## PENICILLINASE-PRODUCING *NEISSERIA GONORRHOEAE*

Patients with uncomplicated PPNG infections and their sexual contacts should receive spectinomycin 2.0 g intramuscularly in a single injection. Since gonococci are very rarely resistant to spectinomycin and because reinfection is the most common cause of treatment failure, patients with positive cultures after spectinomycin therapy should be re-treated with the same dose.

A PPNG isolate that is resistant to spectinomycin may be treated with cefoxitin 2.0 g in a single intramuscular injection, with probenecid 1.0 g by mouth.

### Treatment in Pregnancy

All pregnant women should have endocervical cultures for gonococci as an integral part of prenatal care at the time of the first visit and late in the 3rd trimester.

Drug regimens of choice are APPG, ampicillin or amoxicillin, each with probenecid as described above.

Women who are allergic to penicillin or probenecid should be treated with spectinomycin.

Refer to the sections on acute salpingitis and disseminated gonococcal infections for the treatment of these conditions during pregnancy. Tetracycline should not be used in pregnant women because of potential toxic effects for mother and fetus.

## ACUTE SALPINGITIS (PELVIC INFLAMMATORY DISEASE)

There are no reliable clinical criteria on which to distinguish gonococcal from nongonococcal salpingitis. Endocervical cultures for *N. gonorrhoeae* are essential. Therapy should be initiated immediately.

A. Hospitalization should be strongly considered in the following situations:
   1. Uncertain diagnosis, where surgical emergencies such as appendicitis and ectopic pregnancy must be excluded.
   2. Suspicion of pelvic abscess.
   3. Severely ill patients.
   4. Pregnancy.
   5. Inability of the patient to follow or tolerate an outpatient regimen.
   6. Failure to respond to outpatient therapy.

B. Antimicrobial Agents

Outpatients

Tetracycline* 0.5 g taken orally 4 times a day for 10 days. This regimen should not be used for pregnant patients, or

APPG 4.8 million units intramuscularly, ampicillin 3.5 g or amoxicillin 3.0 g each with probenecid 1.0 g. Either regimen is followed by ampicillin 0.5 g or amoxicillin 0.5 g orally 4 times a day for 10 days.

Hospitalized Patients

Aqueous crystalline penicillin G 20 million units given intravenously each day until improvement occurs, followed by ampicillin 0.5 g orally 4 times a day to complete 10 days of therapy, or

Tetracycline* 0.25 g given intravenously 4 times a day until improvement occurs, followed by 0.5 g orally 4 times a day to complete 10 days of therapy. This regimen should not be used for pregnant women. The dosage may have to be adjusted depending on renal function.

Since optimal therapy for hospitalized patients has not been established, other antibiotics in addition to penicillin are frequently used.

C. Special Considerations

— Failure to improve on the recommended regimens does not indicate the need for stepwise additional antibiotics but requires clinical reassessment.
— The intrauterine device is a risk factor for the development of pelvic inflammatory disease. The effect of the removal of an intrauterine device on the response of acute salpingitis to antimicrobial therapy and on the risk of recurrent salpingitis is unknown.
— Adequate treatment of women with acute salpingitis must include examination and appropriate treatment of their sex partners because of their high prevalence of nonsymptomatic urethral infection. Failure to treat sex partners is a major cause of recurrent gonococcal salpingitis.
— Followup of patients with acute salpingitis is essential during and after treatment. All patients should be recultured for *N. gonorrhoeae* after treatment.

## ACUTE EPIDIDYMITIS

Acute epididymitis can be caused by *N. gonorrhoeae*, *Chlamydia* or other organisms. If gonococci are present by Gram stain or culture of urethral secretions, treatment should be:

APPG 4.8 million units, ampicillin 3.5 g or amoxicillin 3.0 g, each with probenecid 1.0 g. Either regimen is followed by ampicillin 0.5 g or amoxicillin 0.5 g orally 4 times a day for 10 days, or

Tetracycline* 0.5 g orally 4 times a day for 10 days.

If gonococci are not present, the above tetracycline regimen should be used.

## DISSEMINATED GONOCOCCAL INFECTION

A. Equally effective treatment schedules in the arthritis-dermatitis syndrome include:

Ampicillin 3.5 g or amoxicillin 3.0 g orally, each with probenecid 1.0 g, followed by ampicillin 0.5 g or amoxicillin 0.5 g 4 times a day orally for 7 days, or

Tetracycline* 0.5 g orally 4 times a day for 7 days. Tetracycline should not be used for complicated gonococcal infection in pregnant women, or

Spectinomycin 2.0 g intramuscularly twice a day for 3 days (treatment of choice for disseminated infections caused by PPNG), or

Erythromycin 0.5 g orally 4 times a day for 7 days, or

Aqueous crystalline penicillin G 10 million units intravenously per day until improvement occurs, followed by ampicillin 0.5 g 4 times a day to complete 7 days of antibiotic treatment.

B. Special Considerations

— Hospitalization is indicated in patients who may be unreliable, have uncertain diagnosis, or have purulent joint effusions or other complications.
— Open drainage of joints other than the hip is not indicated.
— Intra-articular injection of antibiotics is unnecessary.

C. Meningitis and endocarditis due to the gonococcus require high-dose intravenous penicillin therapy. In penicillin-allergic patients with endocarditis, desensitization and administration of penicillin is indicated; chloramphenicol may be used in penicillin-allergic patients with meningitis.

## GONOCOCCAL INFECTIONS IN PEDIATRIC PATIENTS

With gonococcal infections in children beyond the newborn period, the possibility of sexual abuse must be considered. Genital, anal and pharyngeal cultures should be obtained from all patients before antibiotic treatment. Appropriate cultures should be obtained from individuals who have had contact with the child.

## PREVENTION OF GONOCOCCAL OPHTHALMIA

When required by State legislation or indicated by local epidemiological considerations, effective and acceptable regimens for prophylaxis of neonatal gonococcal ophthalmia include:

Ophthalmic ointment or drops containing tetracycline or erythromycin, or

One percent silver nitrate solution.

Special Considerations

— Bacitracin is not recommended.
— The value of irrigation following the application of silver nitrate is unknown.

## MANAGEMENT OF INFANTS BORN TO MOTHERS WITH GONOCOCCAL INFECTION

The infant born to a mother with gonorrhea is at high risk of infection and requires treatment with a single intravenous or intramuscular injection of aqueous crystalline penicillin G 50,000 units to full-term infants or 20,000 units to low birth weight infants. Topical prophylaxis for neonatal ophthalmia is not adequate treatment. Clinical illness requires additional treatment.

## NEONATAL DISEASE

A. Gonococcal Ophthalmia: Patients should be hospitalized and isolated for 24 hours after the initiation of treatment. Untreated gonococcal ophthalmia is highly contagious. Aqueous crystalline penicillin G 50,000 units/kg/day in 2 doses intravenously should be administered for 7 days. Saline irrigation of the eyes should be performed as needed. Topical antibiotic preparations alone are not sufficient or required when appropriate systemic antibiotic therapy is given.

B. Complicated Infection: Patients with arthritis and septicemia should be hospitalized and treated with aqueous crystalline penicillin G 75,000 to 100,000 units/kg/day intravenously in 2 or 3 divided doses for 7 days. Meningitis should be treated with aqueous crystalline penicillin G 100,000 units/kg/day, divided into 3 or 4 intravenous doses, and continued for at least 10 days.

## CHILDHOOD DISEASE

Children who weigh 100 lbs. or more should receive adult regimens. Children who weigh less than 100 lbs. should be treated as follows:

Uncomplicated Disease

Uncomplicated vulvovaginitis, urethritis, proctitis or pharyngitis can be treated at one visit with:

Amoxicillin 50 mg/kg orally with probenecid 25 mg/kg (maximum 1.0 g), or

Aqueous procaine penicillin G 100,000 units/kg intramuscularly plus probenecid 25 mg/kg (maximum 1.0 g).

Special Considerations

— Topical and/or systemic estrogen therapy are of no benefit in vulvovaginitis.
— Long acting penicillins, such as benzathine penicillin G, are not effective.
— All patients should have followup cultures and the source of infection should be identified, examined and treated.

### Gonococcal Ophthalmia

Ophthalmia in children is treated as in neonates but the dose of penicillin is increased to 100,000 units/kg/day intravenously.

### Complicated Infections

Patients with peritonitis or arthritis require hospitalization and treatment with aqueous crystalline penicillin G, 100,000 units/kg/day intravenously for 7 days. Aqueous crystalline penicillin G 250,000 units/kg/day intravenously 6 times a day for at least 10 days is recommended for meningitis.

### Allergy to Penicillins

Children who are allergic to penicillins should be treated with spectinomycin 40 mg/kg intramuscularly. Children older than 8 years may be treated with tetracycline 40 mg/kg/day orally in 4 divided doses for 5 days. For treatment of complicated disease, the alternative regimens recommended for adults may be used in appropriate pediatric dosages.

# Physical Restraints Or Rapid Neuroleptization?

Kenneth W. Piotrowski, M.D.

**Abstract: Some acutely disturbed patients who present a danger to themselves or other patients often present the physician with a practical problem of management and control. In the past, the use of leather restraints for extended periods of time was the only viable alternate a physician could use to protect that patient and/or other patients from physical harm. Recent advances in psychopharmacology have now made available a second alternative called rapid neuroleptization which, when properly administered, can eliminate or greatly diminish the amount of time a patient needs to be restrained.**

The use of physical restraints is one of the most potentially distasteful[1] and dehumanizing procedures employed today in the treatment of agitated patients. The hazards[2] of keeping a person mechanically immobilized are occasionally forgotten once the immediate crisis is "under control" and sometimes a reticence to remove the restraints exists among the staff until they feel confident it is safe to do so.

Both leather and cloth restraints have long been used in hospitals throughout the world to "protect" certain patients from hurting themselves or from hurting others. There is probably not a psychiatric ward in this country that does not have at least one set of restraints immediately available should the need arise.[1] A recent survey of the use of mechanical restraints in Canada revealed that "guidelines are often non-existent or poorly formulated."[3]

These "protective" restraints can be divided into different categories reflecting the degree of security they provide. A simple posey belt, a cloth restraint securing the upper torso, provides some degree of protection as it attempts to remind the geriatric patient that he is not to get out of bed without assistance. Cloth bracelets may be applied to the wrist of a confused unwilling patient who would like to remove the mysterious tube sticking into his arm. A third type of restraint is made of heavy leather and can be placed around both wrists, both wrists and one ankle, or the infamous four-point restraint which firmly secures all four extremities to the bed. These leather restraints are not merely tied to the patient, but fastened with lock and key.

The sight of a patient in leather restraints can lead one to imagine what the Bicetre must have been like before Pinel removed the chains and manacles.[4]

Certainly no physician would, nor should he, take the unnecessary risk of exposing a seriously disturbed patient to harming himself, other patients, or members of the hospital staff. Frenzied manics, uncontrollable violent schizophrenics, or alcoholics going through delirium tremens can wreak havoc even in a specially designed and protected psychiatric unit. These problems on a general medical floor only compound the risks.

In the past, these unfortunate patients have had to be restrained for days on end. Often times exhaustion resulted from fighting to get out of the restraints. Large doses of sedative-like drugs were prescribed to give a respite in their seemingly endless battle against involuntary imprisonment. The barbiturates were frequently employed to escort the raging psychotic to a twilight reverie of sleep. However, paradoxical excitement, difficulty in titration via the intramuscular route, and especially the lack of antipsychotic activity[5] were significant drawbacks for this class of drugs.

When the IM phenothiazines were introduced, the physician discovered a new tool to ease the suffering of these unfortunate patients. Massive doses of Thorazine could be employed to quiet the acutely disturbed patient. Unfortunately, when one injection of the medication wore off, the patient quickly returned to an agitated state and was soon back in restraints again. Also, potentially dangerous side effects such as extreme hypotension have been reported in the high milligram/low potency analeptics, and again the patients needed to be restrained from getting up less their blood pressure drop to a dangerously low level.[6]

ECT (electroconvulsive therapy) has been effectively used with dangerous uncontrollable patients with fairly good results,[7,8] but in today's practice getting the proper

consent form signed from a patient whose condition is such as to need the treatment in the first place is almost impossible. To proceed with just the next-of-kin's signature on the consent form is legally risky to say the least.

Fortunately, a new technique often referred to as "rapid neuroleptization"[5] or "psychotolysis"[9] has been developed. Several papers have appeared in psychiatric literature over the last several years describing the use of IM or IV low dose/high potency analeptics[5, 8, 10] such as Haldol (haloperidol) and Navane (thiothixene).[9, 11] These drugs can be given every half hour or hour until the patient is in control and no longer needs mechanical bonds to keep him from hurting himself or others.

The mechanics of rapid neuroleptization are not extremely complicated but do require, in addition to a knowledgeable physician, nurses who are experienced or at least willing to gain experience in this treatment modality.

For example, the physician, after an as extensive evaluation as possible, may prescribe 5 or 10 mg. of Haldol IM every half hour on a prn basis. The prn gives a lot of leeway and responsibility to the nursing staff. Some initial difficulty may be encountered when inexperienced nurses interpret prn to mean when the patient is actively fighting against the restraints. To the uninformed nurses, the goal is a patient who is quietly lying with his four extremities manacled. When asked why the patient is still in restraints, the typical response might be, "If we let him out, he will act up again." When asked how they know this to be so, a typical response might be, "He is still talking crazily and is verbally threatening."

The end point of rapid neuroleptization with an antipsychotic tranquilizer is not a patient lying quietly in four-point restraints. It is a patient who is safe to be released from the restraints. Frequently there is cause for injections to be given every half hour or hour for several hours. Case reports of up to 100 mg of Haldol in a 24 hour period have been reported.[5, 9, 12] I have given up to 240 mg in a 24 hour period with good results. Most patients respond to much smaller doses. In Stotsky's study, the total dosage given for haloperidol ranged from 8-32 mg with a mean dose of 15.0 mg, and 4-16 mg for thiothixene with a mean dose of 10.1 mg. Most patients required three or fewer injections.[11] Nurses need proper guidance and close supervision from physicians to interpret the prn to mean still acutely psychotic and potentially violent and not just actively fighting against restraints. The physician himself should check the patient as often as necessary to evaluate the clinical response.

Most agitated patients should come under control within the first six to ten hours and usually sooner. After this occurs, the physician can switch to oral medication. Various similar formulas have been used to convert the total IM dose given in the first 24 hours to a daily oral dose.[5, 12]

For example, one to one-and-one-half total amount of IM medication required to control the patient within the first 24 hours would be given a single oral bedtime dose. For instance, if the patient required 60 mg IM Haldol to achieve a state where he could safely be let out of restraints, another 60 mg could be given p.o. bedtime the same day. Some physicians prefer to use only 80% the same day. Some choose to not give any p.o. medication the same day but will use one to one half the dose in a p.o. form the next day in two divided doses with two thirds of it being given at bedtime. The dose of p.o. Haldol is maintained for a period of time depending on the patient's clinical status and then tapered as soon as possible to a lower dose which would still be therapeutic.

Using the above method of rapid neuroleptization, one should be able to get a patient out of restraints within the first 24 hours of hospitalization. In fact, Anderson[10] has reported treating acutely agitated patients in the emergency room with rapid neuroleptization to the point where some could be followed as outpatients.

The same types of side effects that have been reported during normal use of the high potency/low dose neuroleptics can occur during the rapid neuroleptization phase. Anderson,[8] Carter,[9] and Stotsky[11] reported four out of 24, 14 out of 48, and zero out of 30 cases of extrapyramidal reactions respectively. The incidence of hypotension was much lower with Carter reporting three mild cases out of 48 and Anderson reporting one mild case out of 24. Stotsky did not report any cases of hypotension. The extrapyramidal reactions such as acute dystonias, akinesia, akasthisia, and pseudo-Parkinsonism respond to the usual antidote of an anti-Parkinson drug such as Artane, Cogentin, or Benadryl. If severe hypotension occurs, and again this is a rare phenomenon with high potency/low dose medications, levarterenol or phenylephrine hydrochloride and not epinepherine should be used to maintain blood pressure. Tardive dyskinesia, a persistent disorder involving involuntary movements of the buccolingual-masticatory areas, extremities, or trunk muscles occurring late in the course of neuroleptic treatment or after a reduction of dosage or discontinuation of the drug has not been reported with rapid neuroleptization. The duration of neuroleptic treatment seems to be more important in its etiology than dosage.[13] Therefore, this disorder must be taken into consideration if neuroleptics are to be continued after rapid neuroleptization.

## Summary

The need to keep a violent patient in leather restraints for a prolonged period of time has been greatly

diminished with the advent of the rapid neuroleptization technique using high potency/low dose antipsychotic medication. Education of nursing personnel as to what prn means in these select patients is necessary to insure that the patients receive sufficient amounts of medication. Rapid neuroleptization with the high potency/low dose neuroleptics is a safe and useful tool which should help carry us even further out of the Dark Ages in the care and treatment of the acutely agitated patients.

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# Reducing Rehospitalization of State Mental Patients

## Peer Management and Support

Richard E. Gordon, M.D., Ph.D., Eileen Edmunson, Ph.D., Jeffrey Bedell, Ph.D., and Nancy Goldstein

**Abstract: There are many psychiatric patients in Florida who need not cycle in and out of state mental institutions nor remain there for extended periods. They also need not become derelicts in slum ghettoes as has occurred in other states when large groups were precipitously discharged from state hospitals. Many can live satisfying lives in the community. However, before discharge from the institutions they require programs of treatment which include training for community living. After discharge many patients may benefit from participation in a community support system consisting of former mental patients. This report describes programs developed at the Florida Mental Health Institute for reducing rehospitalization of former state mental institution patients and for improving the quality of their lives in the community. It focuses principally upon peer management and support systems developed for treating patients in the hospital and after discharge. Since preliminary evaluations of these treatment methods have shown them to be effective in reducing rehospitalization, it is suggested that these approaches be incorporated into deinstitutionalization efforts within Florida.**

How can psychiatrists and other physicians effectively treat thousands of seriously disturbed mental patients who orbit in and out of state mental hospitals? How can they provide quality treatment with staffs of limited training and budgets of modest size? How can they and other mental health professionals in the community help great numbers of discharged patients enjoy fulfilling lives in their homes and avoid rehospitalization?

One key answer may be to teach patients (and their families) to help each other. Such a peer-management peer-support approach assumes that it is therapeutic for patients to have responsibilities and for them to help each other to the fullest possible extent. Patients do not develop the feeling of helplessness and inadequacy that they do when they must depend on staff alone for treatment and emotional support. At the Florida Mental Health Institute (FMHI), a variety of peer-support and peer-management techniques are integral (and integrating) components of most treatment plans — including residential, day-treatment, and long-term community programs. Each program is structured in such a way that patients are encouraged to assume responsible roles and staff are prevented from behaving in a "debilitatingly helpful" manner.

FMHI treatments emphasize training in life skills, as many mental patients have never developed adequate skills needed for independent living and others have lost skills while living in institutions where coping behaviors are not rewarded. Life skills may be divided into the following categories: survival, daily living, personal/social, academic/vocational, self-integrative, and leisure (Table 1). Most skills are taught in "modules,"* which are mini-courses of study utilizing educational and behavioral approaches and a variety of teaching techniques — such as role-playing and psychotherapeutic games[1,2]— which can be taught by paraprofessionals.[3,4] Patients are given skill assessments and are assigned to specific classes to receive skill enhancement training where their assessments revealed deficits. Although most patients are successful in learning individual skills through modular training, it

From the Florida Mental Health Institute and University of South Florida, Tampa.

*A self-contained or self-instructional unit of treatment that has an integrated theme, provides patients with information needed to acquire specific knowledge and skills, and serves as one component of a total therapy program.

Table 1

| CATEGORIES OF SKILLS | | GERONTOLOGY | YOUNG ADULTS | CHRONIC ADULTS | ADOLESCENTS | CHILDREN | FAMILIES |
|---|---|---|---|---|---|---|---|
| SURVIVAL SKILLS | Medication Training | X | X | X | | | X |
| | Personal Information | X | | | | X | |
| | Controlling Unacceptable Behavior | X | X | X | X | X | X |
| DAILY LIVING SKILLS | Personal Hygiene/Eating/Toilet | X | | X | X | X | X |
| | Home Care | X | X | X | X | X | X |
| | Independent Living | X | X | X | X | | |
| PERSONAL/SOCIAL SKILLS | Managing Anxiety | X | X | X | | | |
| | Communicating | X | X | X | X | X | X |
| | Personal Health | X | X | X | X | | |
| | Problem Solving | X | X | X | X | | |
| | Asserting | X | X | X | X | | |
| | Negotiating | | X | | X | | |
| | Relaxing | X | X | | | | |
| | Sex Role | | X | | X | | |
| | Peer Support | | X | X | X | | X |
| | Leadership | | X | | | | |
| ACADEMIC / VOCATIONAL SKILLS | | X | X | X | X | X | |
| LEISURE SKILLS | | X | X | X | X | X | |
| SELF-INTEGRATIVE SKILLS | Building Self-Esteem | X | | | | | |
| | Clarifying Values | | X | | X | | |
| | Setting Goals | | X | X | | | |
| | Measuring Personal Achievement | | | | X | | |

Skills taught in Modular Classes to patients of different ages and their families.

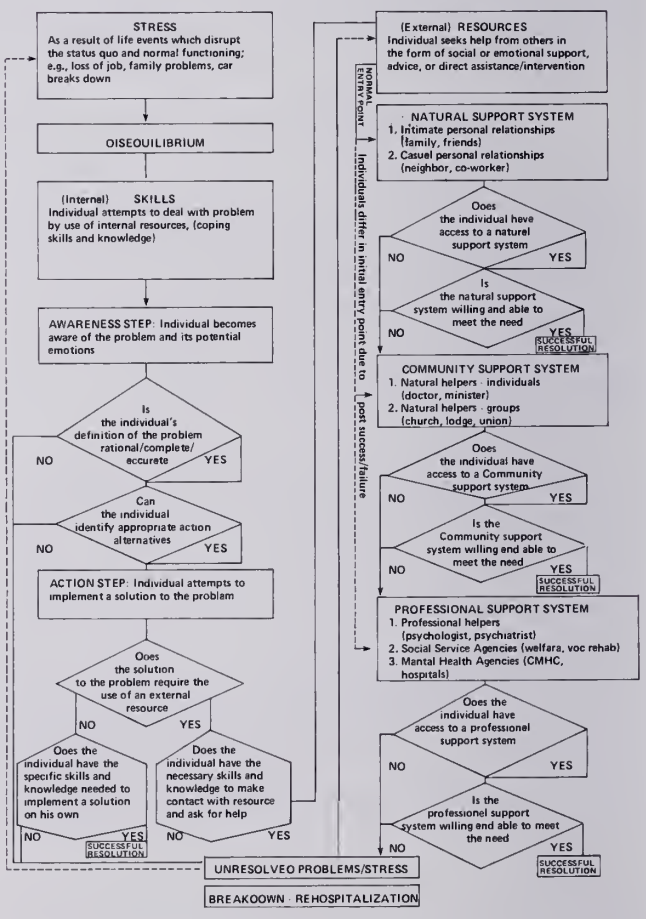


appears that many still need to learn to integrate these skills into such complex behaviors as "getting along with others," "getting support from others," and "working with others toward a common goal." The peer-management and peer-support components of FMHI programs serve to exercise these latter behaviors. Furthermore, peer-management and peer-support components of residential and day-treatment programs help patients to form personal ties with each other, which they maintain upon return to the community. Discharged patients then have a network of people with whom they may exchange comfort, advice, and favors. Establishment of a support network in the community appears to be a critical factor in keeping former patients out of the hospital.

While the average person has a large circle of family, friends, schoolmates and co-workers, most hospitalized mental patients' support systems may be limited to immediate family members. Sometimes, especially after the patient has been repeatedly hospitalized, a family may offer no support at all. While the normal community resident maintains a fairly even give-and-take relationship with people in his support network — giving assistance as well as receiving it — the relationships of mental patients are often less reciprocal. The patient receives support from others but seldom is able to return it. Pattison has shown that normal people have an average social network of approximately 25 people, neurotics can rely upon 10-18 people, but psychotics usually have only 4-5 people in their support systems.[5]

Tolsdorf compared the social networks and coping processes of two groups of hospitalized subjects — recently admitted psychiatric patients and recently admitted medical patients with no psychiatric problems ("normals").[6] In contrast to the normals, the psychiatric patient had fewer intimate relationships, had a network that was made up of proportionally fewer members who were outside the family, and were more often controlled and dominated by their network members. Given these network characteristics, it was not surprising to find that the psychiatric patients were reluctant to draw on their network for support. By contrast, the normal medical

FIGURE 1 - STRESS, SKILLS, RESOURCES, (SSR) ADJUSTMENT MODE



patients had positive feelings for their network and sought out the support and help of others when needed. Tolsdorf found that when the normal group experienced stress they first relied on their own strengths to cope; if this was not sufficient, they turned to their support system. In all cases this strategy kept the stress situation manageable. However, the pattern of the psychiatric group was quite different. To quote Tolsdorf:

> . . . the psychiatric subjects experienced some significant life stress with which they attempted to copy by using their own defenses. When this strategy failed, they chose not to mobilize their networks, relying instead on their own resources, which had already been shown to be inadequate. This resulted in more failure, higher anxiety, a drop in performance and self-esteem, followed eventually by a psychotic episode.

Tolsdorf's study shows that people without an adequate network of people to whom they may turn are at much greater risk than people with a solid support system. Figure 1 shows a model of the relationship between stress, peers, coping mechanisms, and network mobilization that has been developed by Edmunson.[7]

Most mental hospitals refer discharged patients back to their private psychiatrists or to Community Mental Health Centers (CMHCs). This approach has been only partially successful. Traditionally the mental health service delivery system has focused on shoring up a patient's internal and family resources (i.e. improving skills, changing biochemistry, promoting insight). Because of the demonstrated importance of support systems, the FMHI has developed several programs which, in addition to developing a patient's internal resources, also increase his external resources through the formation of a viable support system.

Professionals cannot begin to supply the psychosocial support that patients need. Psychiatrists' offices and CMHCs are not, as a rule, open for business at one o'clock in the morning or on weekends or holidays when patients may be in need of special support. Supplementing the patient's limited support system of family and old friends with a new support network of fellow patients, teaching CMHC or hospital staff to provide modular training,[8-10] and training patients and staff in peer management and support offer promise for maintaining the chronic patient in the community.

## Peer Management for Chronically Disabled Patients

The initial program for chronically disabled residential patients at FMHI used the peer-management approach developed by Fairweather.[8] During their residential stay, patients progressed through a four-level system in which each succeeding level required a higher level of function. This program has been described fully by Fairweather. Briefly, each patient on the treatment unit was assigned to a small peer group. Each group met daily — without staff members present — to discuss the previous day's activities and the progress of individual patients. At these meetings the group provided feedback to members and helped individuals with problem solving and life planning; it also provided incentives for positive behavior change. Staff members served as role models, facilitators, and as feedback "instruments" to help the group focus on maladaptive behaviors. The group made recommendations to the staff regarding money and passes for members who showed satisfactory participation in the program. In making recommendations, members considered the current step-level of each patient and his/her rate of progress.

## Effectiveness of Peer Management with Chronically Disabled Patients

One hundred eleven patients were divided into two groups cross-matched on the basis of age, sex, and diagnostic category (psychotic or nonpsychotic). One group (n=63) participated in the peer-support program; the other, the controls (n=48), in a program of traditional psychiatric rehabilitative therapy. Eighteen months after discharge, 35% of the experimental group were rehospitalized, as compared to 52% of the control group.[10] The rehospitalization rate of the control group is compatible with the average rehospitalization rate in Florida and in the nation: Recidivism rates of 50-55% 18 months after discharge are the rule and may be considered "base-rate data."[11] Furthermore, the mean number of days of rehospitalization for patients in the experimental group was 53.28; for the traditional therapy group, it was more than 2¼ times as large — 121.27.

Findings from this earlier study encouraged FMHI staff to look for other applications of peer-management approaches and social support systems. Two such applications were in a token economy program and in a community support program of discharged patients.

## Peer Management in a Token Economy Program

A peer-managed Token Economy Program (TEP) for motivating patients' performance provides the final phase of treatment received by a group of residential psychiatric patients before they are discharged to the community. These patients are in the Early Intervention Project which treats adults aged 18-45, who have had less than four months' previous hospitalization, in an intensive nine-week (five days per week) skills-training residential program. The peer-managed TEP is a modification of the Fairweather small group: (1) providing more structure so that operation of the program is not dependent on the talent of any one

patient; (2) incorporating more clearly defined treatment goals; (3) using behavioral methods; (4) being designed as a program to provide transition to community living once community discharge becomes feasible for the patients.

The TEP provides patients with a structure within which they practice being responsible and independent and learn behaviors needed for community living. In a sheltered setting where they can make mistakes without catastrophic repercussions, patients rely on their own resources to learn new skills, solve problems, manage difficulties, and prepare for life in the community.

The TEP is organized like a business corporation in which patients' management responsibilities, earnings, and spending are clearly defined and each patient takes charge of a specific area of the TEP's operation. Patients are directly responsible to the TEP Director, a fellow patient, and not to staff. In daily formal meetings, they resolve their own problems, assign tasks, give each other feedback and reinforcement on performance, and plan group activities. The role of the staff is to give written feedback to the group on individuals' performance of assigned tasks. Staff do not problem-solve for patients or in any way provide traditional counseling. Token reinforcements may be spent individually or for group activities. An FMHI community store sells toilet articles, food, books, clothing, etc., in exchange for tokens. Entertainments, outings and other social events are also available.

Patients may earn tokens for performance in any of three areas: participating in modular psychoeducational classes such as communications, problem solving, assertion (Table 1); performing therapeutic tasks which address each patient's specific personal problems ("initiate a two minute conversation" or "make three positive statements about yourself"), and completing tasks that aid the transition to community life ("find the city bus route from your home to the nearest Community Mental Health Center" or "organize and participate in a car wash").

FMHI researchers compared the effects of three different reinforcement conditions on patient performance in the peer-managed TEP: (1) In the "peer reinforcement" condition, feedback information was reviewed by the peer group at their daily meeting, and token points were assigned to each patient according to the peer group's evaluation of this information. (2) In the "staff reinforcement" condition, written feedback on each patient's performance was reviewed by the Staff Coordinator who assigned token points to each patient on the basis of actual performance, but without any input from the patients present at the daily meeting. (3) In the "noncontingent reinforcement" control condition, the written feedback was distributed to patients at the meeting but was not discussed nor considered when tokens were awarded; instead, each patient received a fixed and identical number of points each day, regardless of performance.

Both the peer-reinforced and the staff-reinforced control groups performed, significantly better than the noncontingent-reinforced control group, in terms of their attendance in treatment groups, performance of individual target behaviors and completion of therapeutic tasks. There was no significant difference, however, between the peer- and staff-reinforced groups. These results clearly indicate that contingent token reinforcement was an important factor in determining patient performance, but that this reinforcement may be provided by either peers or professional staff with equal effect.

Clinical observations of the program also point to its effectiveness. The patients were active and goal oriented. Their efforts were clinically relevant to them and were individualized to meet their needs. Patients helped each other to complete tasks and to attend therapy groups and generally provided support for each other. Rarely were TEP patients uninvolved or simply unoccupied on the residential unit. In the "noncontingent reinforcement" control group, on the other hand, lethargic, "institutional" behavior was frequently observed.

The cost-efficiency of the peer-managed TEP is apparent. Only one staff member, working in conjunction with 12 patients, supplied nearly all the professional support necessary to operate a broad-based program on a 24-hour residential treatment unit. A limited amount of clinical support was required from the professional staff of a contemporary staff-managed unit. This support, however, was easily assumed by the available staff on the unit and did not require that additional staff be hired to supply these services to the peer-managed TEP.

The TEP is an approximation of community living; it requires more active coping and community skill than traditional residential treatment, but it is not as difficult as actual independent community life. TEP is used as a transitional treatment program to facilitate patient movement from institutional living into the FMHI community program — the Community Network Development (CND). A description of the CND program and its effectiveness in reducing patient recidivism follows next.

### Peer Support for Community Residents: Community Network Development (CND) Project

CND seeks to increase the amount of peer support available to patient members by arranging a variety of

programs and activities where members can meet, socialize, and work together in a positively reinforcing atmosphere. Because emphasis is on peer support rather than on professional support, CND employs members of the network as activities organizers and managers.

### Preparation for Discharge

CND staff begin preparing patients for the transition from residential treatment to community life during the last weeks of their residence at the Institute. Staff train patients in preemployment skills, peer counseling, group leadership, and community living skills, as well as reviewing patient plans regarding housing, employment, finances, and medical followup.

**Preemployment Skills Training.** Patients learn how and where to look for a job; how to express themselves well nonverbally in an interview; how to dress appropriately for the interview; how to make an employer aware of their assets, and how to deal with such sensitive questions as, "Have you ever been hospitalized?" or "Have you ever been arrested?"

**Peer Counseling Training.** Patients learn to counsel each other. They learn to listen, give, and receive feedback and to use positive reinforcement. CND staff observe patients as they are being trained and learn which patients are most effective as peer counselors.

**Group Leadership Skills Training.** Patients learn group work and leadership, skills which increase their ability to interact effectively with people on the job, in their families, and among their friends. Training includes didactic lessons on leadership, discussions of experiences group members have had in which they made use of leadership qualities, and videotaped role plays of leadership situations. Each group member plans an agenda for a meeting, defines the roles which other group members will represent, presents the agenda to the group, and finally runs a meeting.

**Community Living Skills Training.** Because patients often lack the basic living skills necessary to manage their lives effectively, CND has developed a series of programmed instruction modules designed to teach these new skills. When people join CND, they receive copies of these modules with their Orientation Manuals. The modules cover the following topics:

1. How to Find a Place to Live
2. How to Obtain Assistance From Agencies
3. How to Manage Your Money
4. How to Develop Leisure Skills
5. How to Ride a Bus

Each booklet is designed so that it can be used by CND members to obtain general information or as a resource when a specific need arises.

**Selection of Community Area Managers (CAMs) and a Network Director.** Patients apply for these positions, and staff make selections from applicants on the basis of personal qualities — overall emotional adjustment and motivation — and practical matters — possession of a current driver's license, car, and telephone. The CAMs and Director receive special training as managers and, after discharge from the residential unit, are hired at the minimum wage for 20-30 hours of work per week. The Network Director coordinates the activities of three or four community area groups each managed by a CAM. The CAMs and Network Director receive Peer Counseling manuals. These describe ten of the most common problems that patients may encounter in the community: employment, housing, financial assistance, noninvolvement in the group, suicidal tendencies, training and education, transportation, recreation, patient crises and instability, and medical problems. The manual details step-by-step solutions to each problem and provides a Referral Resource File with addresses and telephone numbers of local helping agencies.

The CAMs' work with members is supervised regularly by a CND staff member, who also provides clinical back-up should the CAMs encounter problems beyond their skill level.

The duties of the CAM are as follows:

1. Organizing and leading weekly area meetings of between 20 and 50 members;
2. Providing peer counseling and referral information when needed and facilitating goal-planning sessions with group members;
3. Meeting with an FMHI staff member weekly to report on activities, problems, and accomplishments and to receive training, consultation, and supervision;
4. Attending monthly network meetings in which CND staff and patients participate;
5. Organizing business or fund raising activities;
6. Calling or visiting group members each week;
7. Assisting group members in times of crisis;
8. Generating a positive attitude among group members.

### Network Activities in the Community

Discharged patients return to the community to live in their own homes, in boarding houses, halfway houses, apartments, and other housing which is currently available there. Each CAM keeps in touch with between 20 and 50 patients who live in neighborhoods within a 30-minute drive.

**Area Group Meeting.** Meetings always include an activity such as a picnic, game, lunch, shopping, etc. A member who has no transportation is picked up by another CND member and taken to the meeting and

activity. Members are encouraged to contact each other socially during the week between meetings to reinforce their social skills and to aid group cohesion.

CND members from the entire Network gather once a month at a meeting which is primarily social in nature. The Network meeting keeps members from different areas in contact, maintaining a sizeable support system for the patients.

Fund-raising events of the Network earn money which is used to sponsor recreational activities. Trips to Disney World, for example, are paid from monies generated by the fund-raising projects, which include car washes, catering service for conferences at FMHI, bake sales, garage sales, and other events.

Many members now call each other just to talk and get together because they enjoy each other's company. They befriend each other when problems arise and help each other solve them. Through the informal network of friendships that CND helps to create, patients have provided temporary housing to fellow peers when difficulties arise in their home situation; they have helped each other get jobs and have loaned each other money. They encourage each other to take their medications and keep their mental health center appointments, and members with cars drive those without transportation to obtain these services.

## Effectiveness of CND Program

Eighty former residential patients were contacted at an average of ten months after discharge from the Early Intervention Project at FMHI. All patients had been either in their first hospital admission for mental illness or had had less than four months' hospital experience prior to their FMHI admission. (Recently, FMHI has begun to admit patients with longer hospitalizations into the CND rogram; however, follow-up data are not yet available on these patients.) While in residence at FMHI, all 80 patients had received intensive psychoeducational treatment which included modular life-skills training and peer-managed TEP training. During the last two of their nine weeks of residence, however, the patients had been randomly divided into two groups. Patients in the control group were referred only to traditional aftercare services (i.e. their referring private therapist or a local Community Mental Health Center.) Patients in the experimental group (CND) were also referred to the CND program and became part of the peer support network.

Ten months after discharge, one half as many patients in the CND group required rehospitalization as compared with the control group (17.5% vs 35%). Moreover, the CND patients on the average required less than one third as many patient days of rehospitalization (7.0 vs 24.6) and a significantly smaller percentage (47.5% vs 74%) needed to continue attending Community Mental Health Centers and other mental health agencies for services.

## Productivity with FMHI Treatment Systems

Peer Management and Support, as part of a system of care which includes modular life-skills training and training in self-medication, has taught many of the least self-sufficient segment of the population — previously institutionalized mental patients — to be more independent and to take more responsibility in caring for themselves and each other.[4] In addition to reducing rehospitalization and patient dependency, programs utilizing Peer Management and Support techniques along with modular training are also efficient in the use of professional and paraprofessional time.

The efficiency of FMHI service delivery innovations is borne out by a recent survey which estimated the percentage of time spent by career service personnel at various duties as obtained from questionnaires from a stratified sample of 64 FMHI personnel. Responses showed that treatment staff were able to devote more than half (53%) their time on research and training activities: to helping invent, develop, and apply treatment innovations; to collecting data and evaluating the effectiveness of new treatments; to conducting training and dissemination. In other words, they required less than half their time at work for accomplishing all their traditional psychiatric routines — patient workups, individual sessions with patients, medications, charting, etc. Thus the use of peer-managed treatment approaches has enabled FMHI staff not only to maintain a full-scale service delivery mission, but to conduct research and training activities as well.

Peer Management and Support, as part of a system of care which includes modular life-skills training and training in self-medication, has taught many of the least self-sufficient segment of the population — previously institutionalized mental patients — to be more independent and to take more responsibility in caring for themselves and each other. Furthermore, it is less expensive than professional management. When used solely in a residential setting, Peer Management reduced recidivism among patients after their discharge. When combined with a token economy, Peer Management was as effective as staff management in effecting improvement in patients' behavior, but was less costly since it required fewer staff. Peer support in a community aftercare setting was three times as effective as traditional treatment in reducing numbers of days of rehospitalization.

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SPECIAL ARTICLES

# Good Health

**Franz Stewart, M.D.**

There can be no answer to the multiple problems of life save the honest, joyous, hardworking living of life. Please look at this. As a child you wondered, dreamed, and you asked yourself, "What am I going to be?" Perhaps you yourself decided or quite possibly circumstances started you in this direction or that.

As you gained an education you adjusted to new friends, new places, helped build a family, shared the problems of your children and relatives. These things came upon you pell-mell, often without notice or deliberate action on your part. You did what you could, and said, "I'll do the best I can." Things worked out one way or another, often for the best.

There was something else. You had your job and this demanded your attention. You could see your expertise grow. You found a niche, worked to get better and better but also became more fixed, more secure in your abilities with your work associates. The frustrations could be balanced by rewarding demands elsewhere but daily routine assumed increasing importance in the daily living of life.

Your life pattern, for good or bad, became a matter of routine much of the time and the multiple problems of life seemed answered better and better by the living of life. Perhaps illness, physical pain, or grief at the loss of a dear one took heavy toll, but there was your life, your job. You could be proud of yourself, you were doing the best you could. Life goes on!

Now comes commencement. Soon you graduate and leave the protected campus life of your job. "What am I going to be?" You realize this was the wrong question; perhaps it should have been, "What am I to become, what sort of man or woman shall I try to be?" The honest, joyous, hardworking living of life fails you. You see death and aging in your future. You must take stock of yourself. The daily routine soon will desert you and leave you to fend for yourself.

After the warm commencement exercises of retirement you walk out to face the world, and now all over again you have the opportunity to ask yourself the very same questions you asked and answered one way or another many years ago. "Where am I going to live? How am I going to pay my way? How will my spouse and I reset our areas of responsibility to each other without work to take me away?"

If retirement to you means leaving the battlefield, just doing nothing, watching the world go by, then you join a large group who become increasingly lonely, lose self-respect, forget the joys of life and seek out the patterns most certain to lead to ill health. The companions of loneliness and loss of self-esteem are indolence, lack of exercise, overeating, overindulgence in alcohol, loss of the stimulus of the beauty of sound, color, and life about you. Then you join the best friend of ill health — boredom!

This could not be you, else you would not be at this conference or would never be reading these pages. You ask, "What have I become? Will I need or enjoy a new job? Have my spouse and I looked into all the new ways we can develop our individual talents and relate even more knowingly to each other?"

"How can I become more aware of life around me? Have I forgotten the importance of seeing rabbit tracks in the snow or raindrops or new leaves? There are so many new ways for me to develop, to use my eyes, ears, nose as paths to lead me to an amazing experience. How long since I realized my place in the scheme of things? I have moved out of the restricted campus of work and have become a part of the real meaning, the feeling of life in the world around me."

Introduce yourself again to your body. Remember this old friend, ignored for so long. Enjoy the use of muscles, teaching them again slowly and carefully just as happened years ago. The dignity of a few wrinkles does not injure the joy of physical well-being. This delight can be earned now but will not be given free. There is a great challenge for your future but this time it must be approached with thought, new information, study of the experiences of others, but most of all by awareness and active work toward the joys and appreciations of life and yourself as a part of the large whole.

Dear friend, if this is your choice, then regardless of problems or illness, you have found Good Health.

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Delivered at the Pre-retirement Seminar presented by the Southeast Banking Corp. of Miami. Dr. Stewart is corporate physician.

• Dr. Stewart, 3661 South Miami Avenue, Miami 33133.

# Public Forum on Cost Containment

**James F. Richards Jr., M.D.**

*Editor's Note: On February 6, 1979, Dr. Richards met with newsmen for about two hours on behalf of the doctors of Florida, explaining the physicians' part in cost containment efforts over the past several years. That evening he addressed some 500 senior citizens of the Broward County area along with a hospital administrator; a consultant for the Metropolitan Life Insurance Co.; a director of employee benefit administration for Motorola; the Deputy Assistant Secretary of the Florida Department of Health and Rehabilitative Services; and an Associate Director of Coopers and Lybrand. This article is a summary of his remarks.*

The medical profession has for years been aware of the cost of medical care. The Florida Medical Association instituted a program in the early 1950's to provide a type of prepayment plan for those who could not afford extensive emergency hospital care. The Blue Cross-Blue Shield activities in Florida have continued until this day, and we all are aware of the role the Blues play as fiscal intermediary, at the request of FMA for administration of Medicare in the State of Florida.

**"FMA has recognized the increasing problems of medical care costs and did create a Medical Cost Committee five years ago."**

FMA has recognized the increasing problems of medical care costs and did create a Medical Cost Committee five years ago. This committee now has evolved to include representation from the Florida Hospital Association, the Florida Medical Association, Labor, Blue Cross-Blue Shield, Commercial Carriers and Industry as outlined by the National Steering Committee. It has undertaken the pursuit of the voluntary effort in this country.

The committee recognizes the cost of medical care is somewhere between 8 and 9 percent of the gross national product and this has been termed by certain politicians as excessive. It may be but if the level of care required by the demand of American patients requires eight to nine percent of the gross national product, then perhaps it is not excessive.

**"Nineteen percent of the health care dollar pays physicians fees. Most of the remainder of the dollar is for hospital costs, medications, and so forth."**

Nineteen percent of the health care dollar pays physicians fees. Most of the remainder of the dollar is for hospital costs, medications and so forth.

Over the past four years, several areas have been identified where medical and hospital people had absolutely no control:

1. Government regulations in the state of New York and in other states cost twenty-five percent of the cost of care;
2. Government regulations account for 50 percent of the cost of administration in hospitals;
3. Utility costs;
4. Labor costs. In Florida, about 45 percent of the cost of hospital care is labor. In 1977, alone, the increase in minimum wage in January added $20 million to hospital costs for that year.

**"Government regulations account for 50 per cent of the cost of administration in hospitals."**

Physicians do have input in some areas, basically in hospital orders. Physicians control the number of people admitted to hospitals, encourage outpatient care, perform outpatient or ambulatory surgery when possible, conduct pre-admission testing.

Through the cost of medical care committee we have asked the 243 hospitals in Florida to do away with

*Dr. Richards is a former Chairman of the FMA Council on Medical Economics and is an FMA representative to the Florida Committee on Cost of Medical Care. He practices orthopedic surgery in Orlando.*

most routine admission orders. This eliminates duplication and can save millions of dollars.

Physicians have also suggested that hospitals share, even consolidate, services to save costs. Many hospitals are sharing purchasing and other services.

The physicians also ask that hospitals educate their staff about test costs as Jackson Memorial Hospital has done. Most physicians are likely to be unaware of the real costs of the procedures they order.

In an effort to educate the physicians as to what various items cost in institutions, signs have been posted in nursing stations, itemizing the cost of the most commonly ordered procedures and tests. Some hospitals have made available a cumulative hospital cost daily on the chart, so the doctor can see what his patient's cumulative charges are each day.

**"I believe the need to order extra tests to practice defensive medicine is no longer as necessary as it once was."**

It is my belief the malpractice crisis is over. I believe the need to order extra tests to practice defensive medicine is no longer as necessary as it once was. In fact, physicians are requested not to order unnecessary or extra tests. We believe this is good medicine and does save money.

In each hospital there is a peer utilization review committee. After a certain length of stay, the committee reviews the patient's condition to see whether his stay is justified. If not, the committee notifies the doctor of the opinion that the patient has been in the hospital too long. The doctors are asked either to justify the hospital stay or advise the patient he must be discharged or make arrangements to pay his own hospital bill since the third-party carrier does not pay the stay from that point onward.

Physicians are under a great deal of pressure from relatives to keep people in the hospital until convenient for them to be home. This is not medically justified and the costs should be borne by the responsible family. This helps remove patients from hospitals more quickly.

Utilization review is used in Medicare in Florida. Since 1970, it has returned over $3½ million dollars to the Medicare program by identifying over-utilization and over-charges. It has cost the Social Security Administration $1 for every $4 paid back.

Although a utilization review program is under contract with Medicaid, it has not yet been instituted. Such a program could be applied and perhaps will be applied to workman's compensation in Florida. It works.

The Blue Cross prospective rate program is a tremendous cost-saving initiative. All but two of the 243 hospitals in the State of Florida participate in this program. In essence, Blue Cross reviews some 3,000 items in each hospital and arrives at a fair and justifiable per diem for each individual hospital. This per diem applies not only to the patients who are covered by Blue Cross, but also applies to workman's compensation and other commercial carrier-covered patients.

Physicians are also trying to educate the population to change life styles by exercising, keeping anxieties down, not smoking, driving carefully, and not drinking while driving. Some accident victims are in the hospital six months to a year. This has a terrible impact on the cost of medical care. Perhaps the drunken driver should be handled more effectively by legislative action.

Senator Gaylord Nelson of Wisconsin dignified the *Voluntary Effort* by offering an opportunity to medical personnel of the private sector to prove they can reduce the inflation rate in hospitals by 2 percent a year.

During wage and price stabilization under Nixon, there was a 900 day period when hospitals and physicians were prevented from raising their rates. During that time, hospital rate of increase was held at 4 to 4½ percent per year. In 1975, the first post-stabilization year, the hospital costs in Florida escalated to 27.7 percent, as anticipated by everyone including Mr. Ted Kennedy. The next year it dropped to 17 percent, rose 17.6 percent in 1977. As of December 1978, something has happened to bring that figure down and our current estimate is that the hospital inflation rate for 1978 will be in the magnitude of 12½ percent. The improvement from 17.6 percent to 12½ percent is a far greater decrease than asked of the medical and hospital professions by the Voluntary Effort and it was done in spite of several circumstances:

**"Some accident victims are in the hospital six months to a year. This has a terrible impact on the cost of medical care."**

1. As of the year end 1978, 250,000 new persons were living in Florida, 40 percent of whom were over 65 years of age.
2. In Florida, 17.1 percent of the residents are over 65, compared to 10 percent nationwide.
3. The over-65 population of Florida utilizes 3000 hospital days per 1000 population per year, as opposed to 790 for those under 65. This is a four-fold utilization for the senior citizens.
4. In 1978, more than 38 million people visited Florida, equal to 800,000 permanent residents. Without any correction for these inequities Florida has performed twice as well as required and expected.

It is the hope of this speaker and the Florida Medical Association that our state and nation can avoid further controls over the private enterprise system, including the medical profession.

● Dr. Richards, 1315 South Orange Avenue, Orlando 32806.

# Services Available to Florida Physicians Through the Statewide Rheumatic Fever Program

**Abstract: The efforts of the Florida Task Force on Rheumatic Fever have resulted in the availability of the following services to physicians in the State of Florida free of charge to their patients:**
**1. Determination of Penicillin and Sulfa in urine of patients receiving oral prophylaxis.**
**2. Streptococcal antibody tests.**
**3. Consultation and review of cases where the diagnosis of rheumatic fever is not clear-cut.**

**Since the institution of these services in 1975, a total of 1,618 specimens were processed for testing of antibiotics in the urine and 7,336 antibody tests were performed on 3,668 sera. An analysis of the distribution of the source of these requests reflected a generalized interest by Florida physicians in availing themselves of these services.**

**In addition to the above services, a pilot study of the prevalence of group A streptococcal pharyngitis in school children was initiated and the Rheumatic Fever Registry for Florida was updated to a computerized format that will allow more comprehensive documentation of the incidence of this disease in Florida and the fidelity with which registered rheumatic patients take their prophylactic medications.**

Five years ago the Florida Task Force on Rheumatic Fever was established. The Task Force, composed of representatives of the Department of Health and Rehabilitative Services, Offices of the Health Program, Children's Medical Services, Florida Medical Association and American Heart Association, undertook a study of the problem of rheumatic fever in Florida and its efforts have resulted in implementation of the following services for physicians:

1. Determination of penicillin and sulfa in urine of patients receiving oral prophylaxis.
2. Streptococcal antibody tests.
3. Consultation and review of cases where the diagnosis of rheumatic fever is not clear-cut.

These services are supported by the state and are performed without charge to all physicians.

In addition the Task Force has, with the collaborative effort of Children's Medical Services and local county health departments, initiated a pilot study on the prevalence of group A streptococcal pharyngitis in school children and updated the Rheumatic Fever Registry to a computerized format that will allow documentation of the incidence of this disease and the fidelity with which registered rheumatic patients adhere to antibiotic prophylaxis.

In this report, we address the purpose, availability and experience that have accumulated over the past three years regarding utilization of the urine test for antibiotics and the streptococcal antibody tests.

**Testing for Penicillin and Sulfa in Urine.** This test is particularly useful in management of patients who are receiving oral prophylaxis. Occasionally it may be used to document that patients who report that they are taking their injections at a different clinic are indeed complying. It is a well-known fact that the hazard of oral prophylaxis resides in patient noncompliance. A relatively "healthy" individual, child or adult, finds it difficult to understand why he has to take medications daily. Unless the reasons are clear, and sometimes it is difficult to clarify these reasons to a child, the patient easily forgets to take prophylactic medications or takes them erratically and therefore does not maintain an adequate level of antibiotics in his tissue. Awareness of the gravity of this omission comes home to some delinquent patients only when they are stricken with an acute recurrence of rheumatic disease. The consequence then may be severe and sometimes fatal cardiac damage. The urine test for penicillin or sulfa is helpful to the physician who wants to obviate this hazard. A sample of urine obtained during follow-up visits is tested. A negative result should alert

**Table 1. — Numbers and Percent of 1,618 Urine Specimens from Rheumatic Fever and Heart Disease Patients Negative for Penicillin, by Age Group 1975-77.**

| Age (years) | Specimens | Negative | Percent Negative |
|---|---|---|---|
| 5-9 | 134 | 41 | 29.1 |
| 10-15 | 514 | 209 | 40.7 |
| 16-21 | 454 | 181 | 39.9 |
| 22+ | 486 | 204 | 42.0 |
| Unspecified | 30 | 10 | 33.3 |
| Total | 1,618 | 645 | 39.9 |

the physician to noncompliance by his patient and allow institution of measures to minimize or prevent the danger of subsequent omission of prophylaxis.

Beginning in March 1975, the State Public Health laboratory initiated a service to test urine specimens for antibiotics. The results of the tests are summarized in Table 1. Over one third of the specimens were negative for antibiotics, indicating that the patient was not taking the prescribed antibiotic. Although this rate of delinquency is similar to that reported from other centers, it reflects a dangerously high level of noncompliance in all patient age groups.

**Streptococcal Antibody Tests.** These serological tests which include the anti-DNAse B and the A-antibody are helpful in providing specific evidence for an antecedent group A streptococcal infection. While the tests may be useful in assessing the occurrence of recent streptococcal infections, they are particularly indicated in patients with complications of group A streptococcal infections such as rheumatic fever or glomerulonephritis. In addition, the A-antibody test can be particularly helpful in differentiating rheumatic valvular heart disease from nonrheumatic valvular disease. For example, if a patient presents with mitral or aortic valvular disease without a good history for an attack of acute rheumatic fever in the past, the physician is faced with the dilemma of deciding whether the valvular disease is of rheumatic or nonrheumatic etiology. The performance of the A-antibody test may help in clarifying this question.

During the past three years following provision of these streptococcal antibody tests, 3,668 sera have been tested. Analysis revealed that approximately 90% of these tests were performed on patients under age 20 years.

Table 2 outlines the statewide distribution of testing for antibiotics in the urine and for antibody tests. Although requests from certain counties are disproportionately lower than others, the distribution and frequency reflect the generalized interest of physicians in availing themselves of these services. Perhaps with increasing awareness of the availability of these tests, distribution of requests will become more even. To utilize these services the physicians should contact:

1. Urine Test for Penicillin-Sulfa:
   Dr. Nathan J. Schneider
   Director, Office of Laboratory Services
   Department of Health and Rehabilitative Services
   Jacksonville, Florida 32231

   Dr. Schneider's laboratory will provide the physician with the Test Kit and directions for its processing. (In certain instances the local county health department may provide the kits.)

2. Streptococcal Antibody Tests
   Mail 3-5 ml of serum in a sterile container to:
   Dr. Elia M. Ayoub
   Department of Pediatrics
   Box J-296, JHM Health Center
   University of Florida
   Gainesville, Florida 32610

   Sample should be accompanied by a completed request form which is available at the same address.

This report submitted by the Florida Task Force on Rheumatic Fever.

**Table 2. — Specimens by County, July 1975-July 1977.**

| County | Urine Test For Antibiotics | Streptococcal Antibody Tests |
|---|---|---|
| Alachua* | 9 | 216 |
| Baker | 1 | 0 |
| Bay | 4 | 88 |
| Bradford | 2 | 2 |
| Brevard | 64 | 4 |
| Broward | 2 | 0 |
| Clay | 1 | 0 |
| Collier | 23 | 24 |
| Columbia | 154 | 0 |
| Dade | 33 | 416 |
| DeSoto | 10 | 0 |
| Duval | 180 | 624 |
| Escambia | 0 | 200 |
| Gadsden | 69 | 0 |
| Gilchrist | 0 | 40 |
| Glades | 27 | 0 |
| Hendry | 49 | 0 |
| Hillsborough | 0 | 48 |
| Jackson | 8 | 0 |
| Lee | 0 | 8 |
| Leon | 70 | 796 |
| Madison | 1 | 0 |
| Okaloosa | 10 | 0 |
| Orange | 55 | 212 |
| Osceola | 4 | 0 |
| Palm Beach | 0 | 280 |
| Pasco | 47 | 12 |
| Pinellas | 592 | 72 |
| Polk | 48 | 0 |
| Sarasota | 0 | 50 |
| Seminole | 2 | 0 |
| Sumter | 42 | 0 |
| Suwannee | 1 | 0 |
| Volusia | 45 | 124 |
| Walton | 1 | 0 |
| Not specified | 77 | 452 |
| Total | 1,618 | 3,668 |

***Does not include 450 tests done at University of Florida.**

# Florida Licensure Statistics

Robert G. Steele, M.D.

**Abstract: This article depicts various changes in the makeup of Florida physicians. It uses data gathered by the Board of Medical Examiners. It also gives data on groups passing the Florida Medical licensure examination.**

A total of 14,699 persons took the examination to practice medicine in Florida from July 1971 to July 1978 and 19,468 licenses were issued following examination and by endorsement in this seven year period. The number granted licensure by FLEX or National Board endorsement increased from 134 in 1971 to 1,325 in 1978. Beginning June 1979, the FLEX examination has been used for all Florida applicants.

The number of women taking the examination has steadily increased from 10% to 20% (Fig. 1), but the number of physicians under age 30 years has decreased from 22% in 1971 to a "fairly" steady 5% for the past two years. Other age groups remain about the same except for a transient rise in those over age 60.

Of total applicants, 32% were graduates of medical schools in the United States and 67% of foreign schools. The cumulative pass rate was 54% for all examinations,

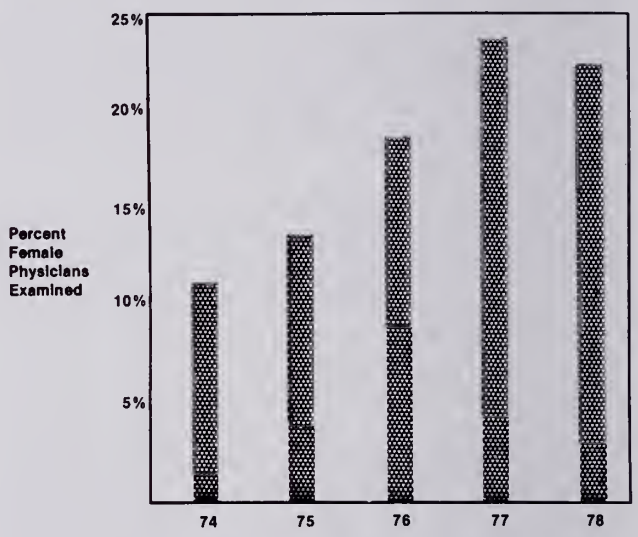


Figure 1

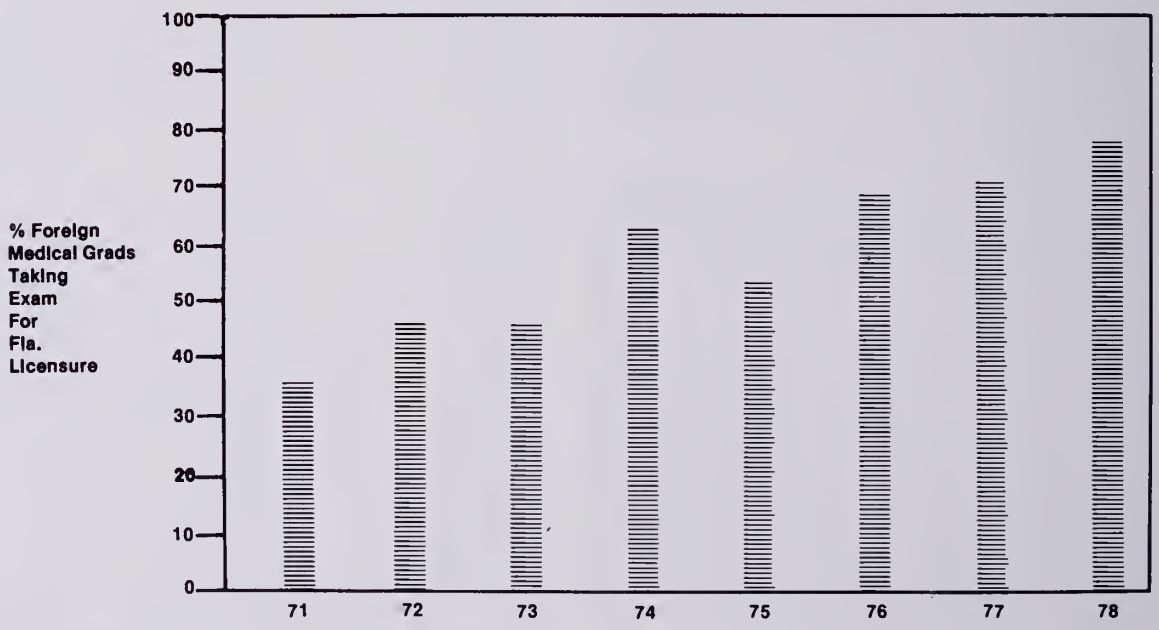


Figure 2

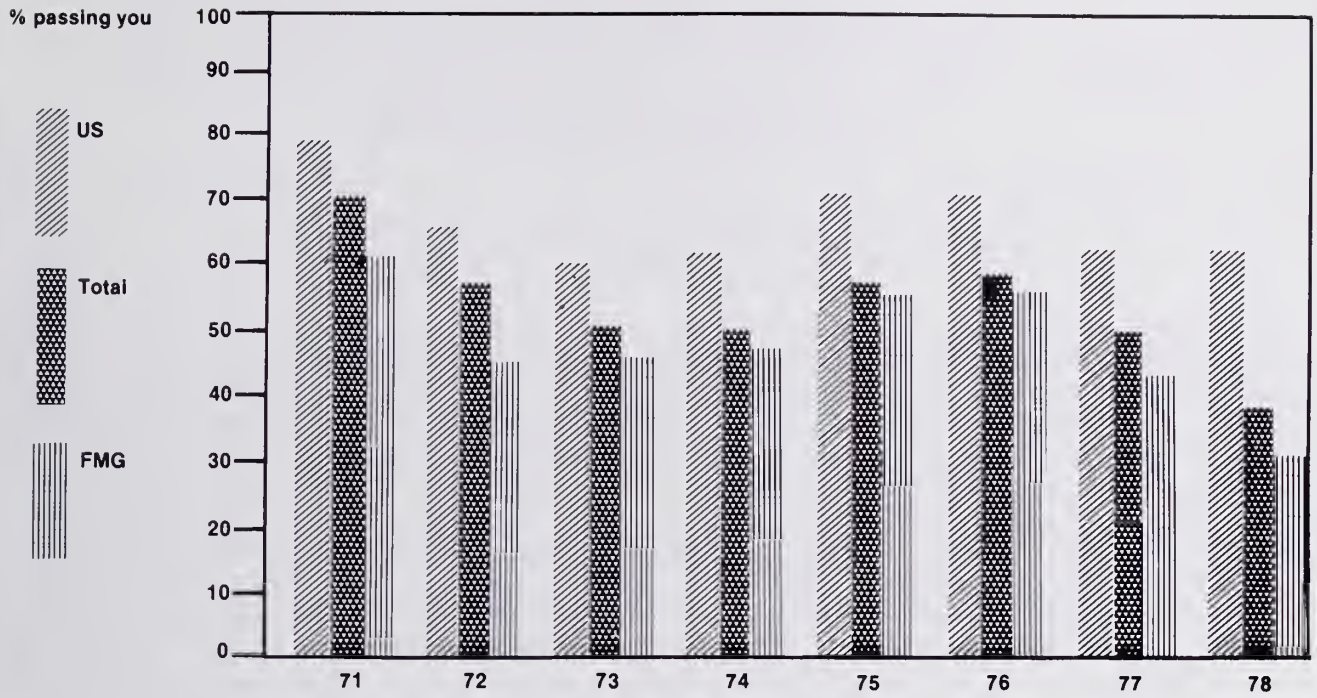


Figure 3

**Table 1.—Racial and Ethnic Origin.**

| | Jan. 1976 | Jan. 1977 | July 1977 | July 1978 |
|---|---|---|---|---|
| Caucasian | 477 | 380 | 489 | 311 |
| Black (Negro) | 26 | 18 | 29 | 29 |
| American Indian | 1 | 0 | 1 | 0 |
| Oriental | 283 | 503 | 527 | 131 |
| Spanish | 328 | 273 | 158 | 163 |
| Other* | 18 | 13 | 101 | 101 |

*Indians, Filipinos, French, Italian and German.

68% for U.S. graduates and 32% for foreign graduates, which indicates that the U.S. graduate fares about twice as well as the foreign graduate.

Age appears to be a factor in pass/fail. The physician 15+ years out of medical school has less than a 50/50 chance of passing the Florida examination.

Origin of applicants during the seven-year period is shown in Figure 2. Note the initial preponderance of graduates from the United States, the "50/50" period, and the current heavy preponderance of foreign graduates which have been increasing steadily — 36% in 1971, 70% in 1977, and 78% in 1978. Statistical significance in percentages of U.S. and foreign graduates passing the examination is noted in Figure 3.

Racial and ethnic origin figures are presented in Table 1. The decrease in Spanish and increase in "Other" may be an arbitrary lumping or splitting of the Philippine medical graduates.

We estimate that about 16,000 physicians are in active practice in Florida. All those licensed do not practice in the state; notwithstanding the surge in licensure is apparent.

Appreciation is expressed to Dale Cox of MEDAC and to Dr. George Palmer and Mrs. Dorothy Faircloth of Tallahassee for their assistance.

● Dr. Steele, 1880 Arlington Street, Sarasota 33579.

**The most valuable gift you can give another is a good example.**

# Culturing for Isolation of Neisseria Gonorrhea

N. J. Schneider, Ph.D., M.P.H.* and M. B. Jefferies, M.P.H.*

Introduction of the gonorrhea culture screening program in Florida in 1972 was made possible with the development of "Transgrow", a self contained bottle of modified Thayer-Martin (MTM) growth medium with carbon dioxide ($CO_2$) added in the gaseous phase, a requirement for the growth of *N. gonorrhea*. Prior to this time, the fastidious nature of the organism precluded state public health laboratories from providing bacteriological cultural examinations except to the venereal disease clinics in the county health units located nearby. The enthusiastic response by physicians and county health centers statewide resulted in steadily increasing numbers of cultures submitted to the state public health laboratories. From a low of 54,465 cultures in 1971, the program expanded rapidly to a peak of 564,892 cultures in 1974. Adjustments of the population groups screened resulted in a lowering of the specimen workload to a total of 515,086 in 1978. The positivity rate for the six year period (1973-78) has averaged 5.7%; last year being 6.3% (includes a small number of male patients and rescreen of positives).

Since late 1976, the state laboratory has utilizing a modification of the Transgrow system for cultures from public health clinics. This modified method, known as the "plastic bag-$CO_2$-tablet" method consists of a petri plate containing MTM (Transgrow) medium, which after inoculation with the clinical material, is sealed in the plastic bag, together with a $CO_2$ generating tablet. The inoculated culture is incubated at 35-36°C for 36-48 hours in the clinic before transport to the laboratory.

The transgrow system is acceptable as an alternate method, providing care is taken to remove the excess moisture from the surface of the agar prior to inoculation of clinical material and loss of $CO_2$ is avoided during manipulation of the bottle when the cap is removed. Both of these precautions can be accomplished by holding the neck of the bottle upright at all times when the cap is removed, and by soaking up all of the excess moisture in the bottle with the specimen swab before inoculating the surface of the culture medium. As with the plastic bag-$CO_2$-tablet method, prior incubation of the Transgrow culture before transport to the laboratory is recommended. If incubation facilities are not available, the culture should be transported to the laboratory with minimal delay, but no longer than 24-36 hours after inoculation.

The state public health laboratories are not alone in providing culturing services in the gonorrhea control program. Many private and hospital laboratories are also providing this service.

*Dr. N. J. Schneider is Director and Ms. M. B. Jefferies is Chief Microbiologist in the State Department of Health and Rehabilitative Services, Office of Laboratory Services, State of Florida, Jacksonville.

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**If you think you are confused, consider poor Columbus.**
**He didn't know where he was going when he started,**
**When he got there, he didn't know where he was,**
**When he got back, he didn't know where he had been.**

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# LEGISLATIVE NEWS

The 1979 Florida Legislature enacted several bills of both direct and indirect interest to physicians of the State. The following summary of some of these new laws was prepared by the FMA Capital Office:

### Health Care Cost Containment Act of 1979 (CS/HB's 619 and 917)

**Health Care Cost Containment Board:** Board with nine members located for administrative and budgetary purposes in the Department of Insurance. Board appointed by the President of the Senate, Speaker of the House, and Insurance Commissioner.

**Board Makeup:**
3 major health-care purchasers, 2 of whom will be from the insurance industry
3 professional health-care providers, 2 of whom will be hospital administrators
3 consumers, one of whom shall represent the elderly

**Uniform System of Financial Reporting:** Board shall specify a uniform system of financial reporting based on a uniform chart of accounts. This provision shall not be construed to authorize the board to require the hospitals to adopt a uniform accounting system.

**Reports:** Board shall annually publish and disseminate a study comparing the rates and charges and other relevant information of all hospitals, both statewide and by county.

**Budget Review:** Board is authorized to review the budget of any hospital at a public hearing if it finds that the hospital's rates and charges or other statistical indicators as the board may define are in the upper 20% of such indicators for all hospitals in its class or group. Findings in connection with any hearings shall be published in the newspaper of largest general circulation in the county in which the hospital is located.

**Quality Assurance Program:** Each hospital shall maintain a quality assurance program, which program shall include monitoring of the necessity of admission, appropriateness of the length of stay, proper utilization of services, and the evaluation of the quality of services rendered.

**State Reimbursed Services:** Payment for hospital, medical or other health care services which are to be reimbursed by the state, either directly or indirectly, shall be made to the health care provider not more than 35 days from the date eligibility for payment of such claim is determined.

**Physician Exemption:** Physicians providing services in a hospital are specifically exempted from reporting requirements provided they bill independently.

### Worker's Compensation Law (CS/SB 188)

The Division of Workers' Compensation of the Department of Labor and Employment Security will develop a fee schedule of maximum charges for hospital and medical services. Individual health care providers will be paid either his usual and customary fee or the maximum fee schedule charge, whichever is less. Hospital reimbursement will be based on the lowest prevailing charge in the hospital's community.

The division is further mandated to contract with *a private nonprofit medical foundation* to provide peer review of health care services. This peer review will occur after the division's utilization review has determined that services rendered have fallen outside the usual range of utilization based on medically acceptable standards.

*(To Be Continued Next Month)*

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**Tenuate® ℞**
(diethylpropion hydrochloride NF)

**Tenuate Dospan®**
(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

**INDICATION**: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

**CONTRAINDICATIONS**: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma Agitated states Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

**WARNINGS**: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly *Drug Dependence* Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy*: Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children*: Tenuate is not recommended for use in children under 12 years of age.

**PRECAUTIONS**: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

**ADVERSE REACTIONS**: *Cardiovascular*: Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System*: Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal*: Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic*: Urticaria, rash, ecchymosis, erythema, *Endocrine*: impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System*: Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous*: A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

**DOSAGE AND ADMINISTRATION**: Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in midevening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.

**OVERDOSAGE**: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

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*Direct Medical Inquiries to*
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**References**: 1. Citations available on request from Medical Research Department. MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon [Dillon], R.H., and Leyland, H.M. A comprehensive review of diethylpropion hydrochloride. In, Central Mechanisms of Anorectic Drugs, S. Garattini and R. Samanin, Ed., New York, Raven Press, 1978, pp 391-404


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# Overweight may not always be simple... complications can develop.*

# Complicated or not...

# Tenuate® Dospan® ℃ IV

## (diethylpropion hydrochloride NF)

**75 mg. controlled-release tablets**

### A useful short-term adjunct in an indicated weight loss program.

Overweight patients in certain diagnostic categories often require strict appetite control and a successful program of weight reduction may tend to diminish the incidence or severity of the complications in some patients. Diethylpropion hydrochloride has been reported useful in such patients and while it is not suggested that Tenuate itself in any way reduces the complications of overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. **Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.**

### In uncomplicated overweight.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

### Clinical effectiveness.

The anorectic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.[1] And the unique chemistry of Tenuate provides "...anorectic potency with minimal overt central nervous system or cardiovascular stimulation."[2] Compared with the amphetamines, diethylpropion has minimal potential for abuse.

## Tenuate—it makes sense. And it's responsible medicine.

*Studies have shown that obesity is associated with an increased incidence of hypertension, symptomatic heart disease, adult-onset diabetes, and other diseases.

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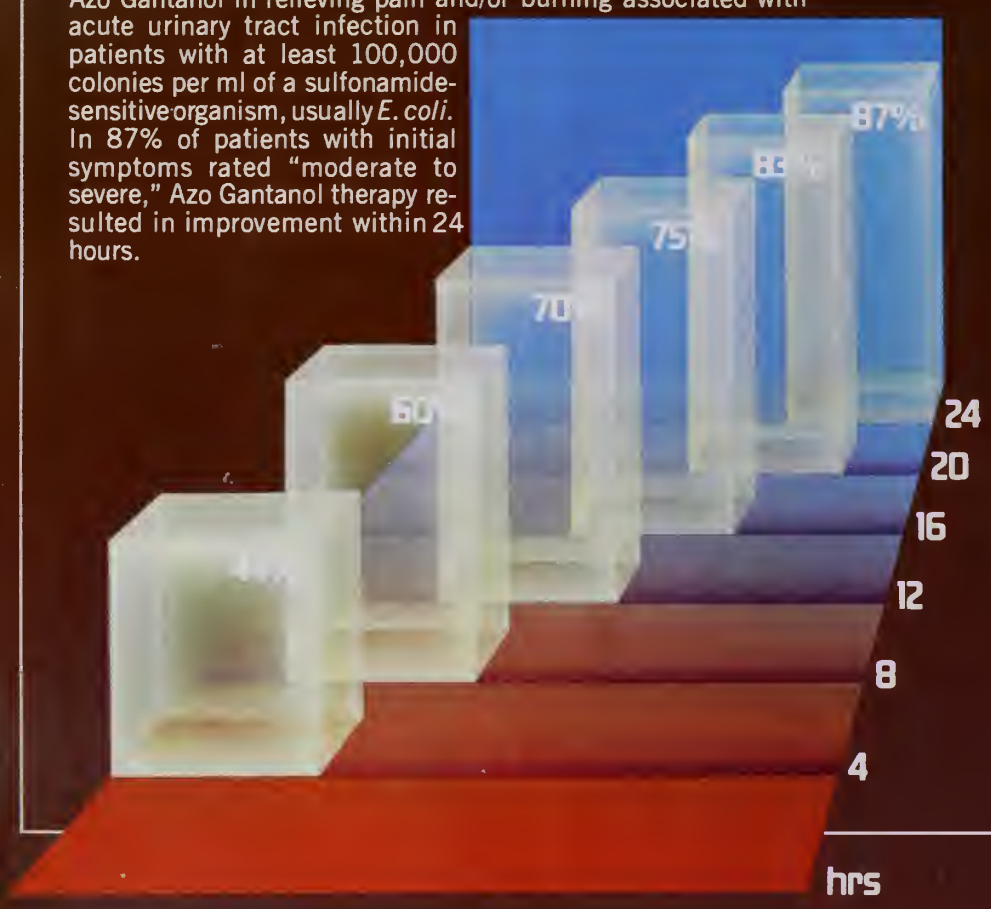
For prescribing information see opposite page.

## Important data on the pain of acute cystitis:

# In 87% of patients studied [303 of 349], Azo Gantanol® reduced pain and/or burning within 24 hours*

A controlled, multicenter study assessed the efficacy of Azo Gantanol in relieving pain and/or burning associated with acute urinary tract infection in patients with at least 100,000 colonies per ml of a sulfonamide-sensitive organism, usually *E. coli*. In 87% of patients with initial symptoms rated "moderate to severe," Azo Gantanol therapy resulted in improvement within 24 hours.




**Before prescribing, please consult compl uct information, a summary of which follo**

**Indications:** In adults, urinary tract infect complicated by pain (primarily pyelonepl pyelitis and cystitis) due to susceptible o (usually *E. coli, Klebsiella-Aerobacter, St* coccus *aureus, Proteus mirabilis,* and, le quently, *Proteus vulgaris*) in the absence obstructive uropathy or foreign bodies. N **fully coordinate *in vitro* sulfonamide sens tests with bacteriologic and clinical respo aminobenzoic acid to follow-up culture m increasing frequency of resistant organism the usefulness of antibacterials including fonamides.** Measure sulfonamide blood le variations may occur; 20 mg/100 ml shou maximum total level.

**Contraindications:** Children below age 12; fonamide hypersensitivity; pregnancy at te during nursing period; because Azo Ganta tains phenazopyridine hydrochloride it is c dicated in glomerulonephritis, severe hep uremia, and pyelonephritis of pregnancy w disturbances.

**Warnings:** Safety during pregnancy not est Deaths from hypersensitivity reactions, ag tosis, aplastic anemia and other blood dys have been reported and early clinical signs throat, fever, pallor, purpura or jaundice) r dicate serious blood disorders. Frequent C urinalysis with microscopic examination a ommended during sulfonamide therapy.

**Precautions:** Use cautiously in patients wi paired renal or hepatic function, severe all bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in wh dose-related hemolysis may occur. Maintai adequate fluid intake to prevent crystalluri stone formation.

**Adverse Reactions:** *Blood dyscrasias* (agra ulocytosis, aplastic anemia, thrombocyto leukopenia, hemolytic anemia, purpura, hy thrombinemia and methemoglobinemia); a *reactions* (erythema multiforme, skin erupt Stevens-Johnson syndrome, epidermal nec urticaria, serum sickness, pruritus, exfolia dermatitis, anaphylactoid reactions, perior edema, conjunctival and scleral injection, sensitization, arthralgia and allergic myoca *G.I. reactions* (nausea, emesis, abdominal hepatitis, diarrhea, anorexia, pancreatitis a stomatitis); *CNS reactions* (headache, peri neuritis, mental depression, convulsions, a hallucinations, tinnitus, vertigo and insom *miscellaneous reactions* (drug fever, chills, nephrosis with oliguria and anuria, periarte nodosa and L. E. phenomenon). Due to ce chemical similarities with some goitrogens, uretics (acetazolamide, thiazides) and oral glycemic agents, sulfonamides have cause instances of goiter production, diuresis and glycemia. Cross-sensitivity with these agent exist.

**Dosage:** Azo Gantanol is intended for the a painful phase of urinary tract infections. *Us adult dosage:* 2 Gm (4 tabs) initially, then 1 (2 tabs) B.I.D. for up to 3 days. If pain pers causes other than infection should be soug After relief of pain has been obtained, conti treatment with Gantanol (sulfamethoxazole) be considered.

*NOTE:* Patients should be told that the oran dye (phenazopyridine HCl) will color the uri

**Supplied:** Tablets, red, film-coated, each co ing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl—bottles of 100 and 5

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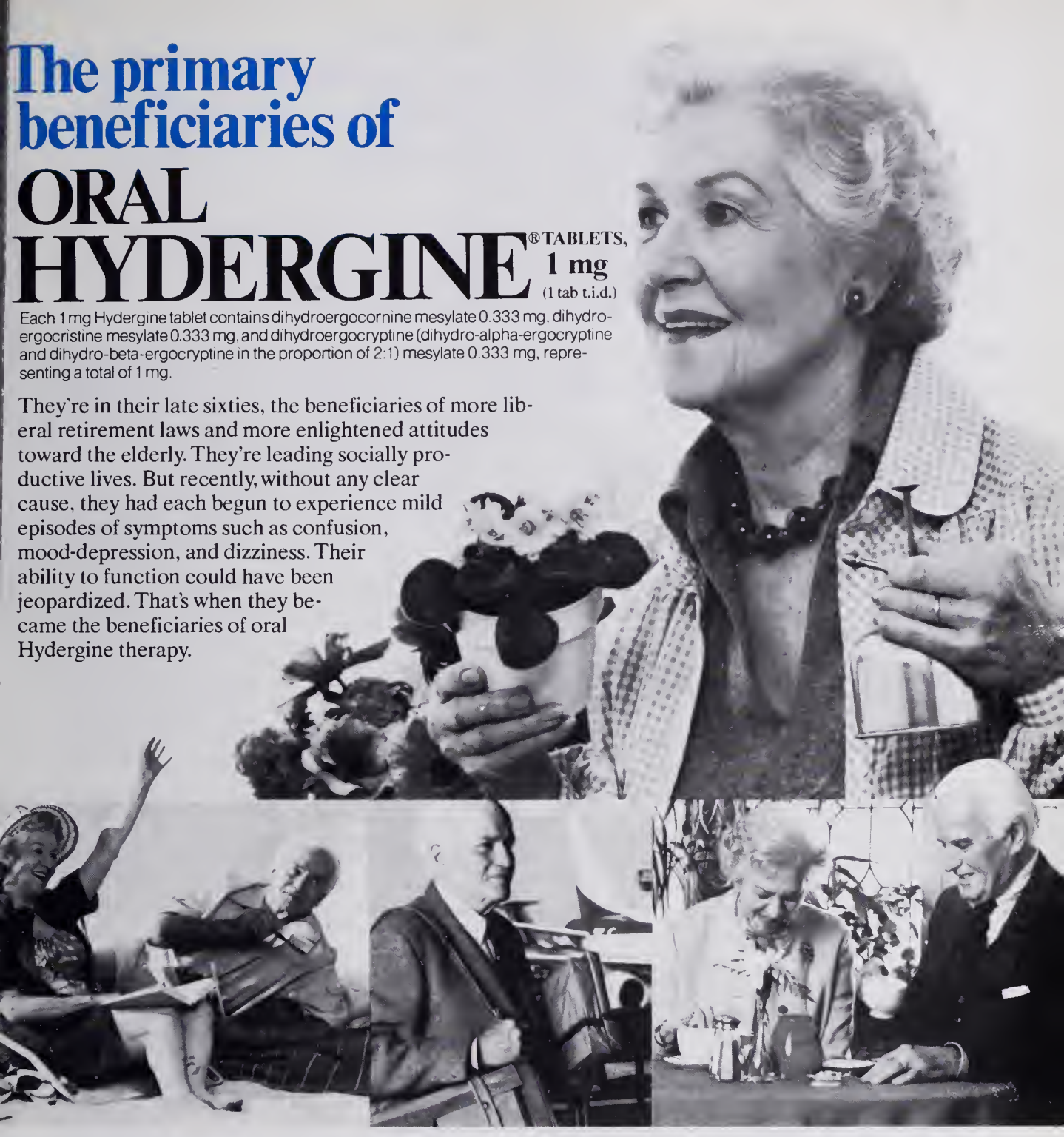
They're in their late sixties, the beneficiaries of more liberal retirement laws and more enlightened attitudes toward the elderly. They're leading socially productive lives. But recently, without any clear cause, they had each begun to experience mild episodes of symptoms such as confusion, mood-depression, and dizziness. Their ability to function could have been jeopardized. That's when they became the beneficiaries of oral Hydergine therapy.



## The still-functioning geriatric can benefit from Hydergine treatment

It is quite common for cognitive and emotional symptoms of deterioration to manifest gradually in the elderly. During this early stage, such symptoms are mild and more amenable to treatment. It is at this stage that Hydergine therapy has proved most effective. Patients tend to respond better, and with symptoms effectively relieved—or at least their progression retarded—the ability to function can be maintained.

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**Precautions:** *Because the target symptoms are of unknown etiology, careful diagnosis should be attempted before prescribing Hydergine tablets and sublingual tablets.*
**Adverse Reactions:** Serious side effects have not been found. Some sublingual irritation, transient nausea, and gastric disturbances have been reported. Hydergine tablets and sublingual tablets do not possess the vasoconstrictor properties of natural ergot alkaloids.
**Dosage and Administration:** 1 mg three times daily. Alleviation of symptoms is usually gradual and results may not be observed for 3–4 weeks.
**How Supplied: Hydergine tablets (for oral use) 1 mg,** packages of 100 and 500. **Hydergine sublingual tablets 1 mg,** containing dihydroergocornine mesylate 0.333 mg, dihydroergocristine mesylate 0.333 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.333 mg, representing a total of 1 mg, packages of 100, 500, and 1000. **Hydergine sublingual tablets 0.5 mg,** containing dihydroergocornine mesylate 0.167 mg, dihydroergocristine mesylate 0.167 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.167 mg, representing a total of 0.5 mg, packages of 100 and 1000.
*Before prescribing, see package insert for full product information.*

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# Others Are Saying

## Profile/Richard S. Hodes, M.D. Legislator, Medical Leader

Two crowns of power vie for room on the head of Richard Hodes, M.D.

Dr. Hodes, recently picked up the speaker pro tem gavel in the Florida House of Representatives after 13 years as a member legislator.

With only four years of high level medical political activity behind him, he was voted president-elect of the 12,000-member Florida Medical Association (FMA) last year and was installed during the FMA annual meeting in May.

There's room in his life for both crowns, said Dr. Hodes, an anesthesiologist who learned to juggle his schedule when he was first elected to the state house located in Tallahassee, a 40-minute plane ride from his home in Tampa. His children are grown, his wife has activities independent of his, so the only pull on his 60% Tampa time are the patients he sees on rounds at Tampa General Hospital who all want to talk politics with him, he said.

Dr. Hodes was contacted by telephone by *American Medical News* in his capital office where the secretary refers to him as Rep. Hodes. He denied that his policy making decisions clash when he doffs one title and dons the other. "There's no greater conflict of interest on my part than any other physician legislator experiences," he said. Every lawmaker brings to the job prejudices from his background, he said, pointing out that in the Florida legislature there are two dentists, two pharmacists, one chiropractor, and two other physicians (David Lehman, M.D., and William G. "Doc" Meyers, M.D.). "I pursue what's best for the people of the state, and that's the same for both jobs," he said.

His goals, however, are different. As speaker pro tem, education, rather than health issues, is his main priority. In fact, he holds the purse strings for the entire Florida education system in his capacity as appropriations chairman of the education and appropriations committee. "All the money that goes into state education pases under his scrutiny, he said, and that's a lot of bucks to pass out. Sixty-five percent of the state budget goes through my committee. That's $3 billion a year."

His current pet project is to create a program for endowment of chairs of excellence in the state university system with the universities providing matching challenge funds for what the state gives them.

He would also like to see more selectivity in the university admissions process and would help that along through a change in the funding system.

But he doesn't forget his roots in his pursuit of educational excellence in Florida. "I'd like to see the enhancement of medical education in the state," he said. The University of Florida Medical School, for example, is building a new hospital and will repay the state on a tax-free ten-year plan. As the school repays its loan, the money will go into an endowment fund and the income from that will provide further enhancement funds.

As FMA president, Dr. Hodes has a different set of plans. He rattled off his top commitments.

"I would like to see the state provide catastrophic health coverage." He said he could envision a plan "something like Maine tried" though it couldn't find an appropriate form.

"I'd like to see an improvement of the health quality in institutions, like prisons or mental health facilities. Our best people aren't (working) there" probably, he said, because they aren't paid enough.

Dr. Hodes would also like to see the state's Department of Health and Rehabilitative Services split into two organizations because "health loses its visibility in the overall social services structure."

During his FMA inauguration address, Dr. Hodes called for his membership to be "a 12,000-man truth squad" to bolster another concern — public awareness on the cost of health. "Any doctor who is aware of an uncommon increase in health costs anywhere should report it to FMA and we'll point a finger.

"If a VA hospital raises salary levels way beyond others in a community, if a private agency does the same, if a drug company or instrument company raises prices beyond a reasonable level, I'm going to ask why.

"We'll be careful in pointing a finger to make sure it's a legitimate complaint" he added and noted that health cost complaints make for an issue that cuts across his allegiance lines. He's just as concerned "as a member of a government agency and the president of FMA."

The death of convicted murderer John Spenkelink, executed one day before Dr. Hodes was inaugurated,

provoked a reaction that also cut across both his lives as a state figure. "I'm not a strong proponent of capital punishment. Spenkelink was a poor choice. He did not commit the kind of heinous crime for which capital punishment should be reserved. It's more for the Richard Speck case in Chicago. (Speck mutilated and murdered eight nurses.) There's no conceivable way that Speck could be restored to society. I certainly would not want to have been the judge that pronounced the sentence on Spenkelink."

He'd rather just be a physician and legislator. "It's kind of fun. I've dealt with the issues of being a physician in the legislature. I've accepted the label of being a special interest representative. But generally I'm viewed as being objective.

"I'm a firm believer in the citizen/legislator — everyone has a special interest." The list of his interests could include the Democratic Party, the National Conference of State Legislators, an organization in which, come July, he will assume the post of president-elect, or the University of Florida College of Medicine and the University of South Florida College of Medicine where he holds appointments. He has time for all, he said.

"I enjoy being a doctor," he also noted.

Judy Alsofrom

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Reprinted from *American Medical News*, June 29, 1979.

# Bob's By-Lines

**Robert K. Wilson Jr., M.D.**

"A merry heart worketh good like a medicine." This is a proverb from the scriptures. Let's don't get bogged down with whether it should say "as a medicine" instead of "like a medicine." It's the principle that needs to be conveyed; humor or happiness for medicinal purposes. Is it helpful? Frankly, there is virtually nothing in the literature to document its effectiveness so it's almost anecdotal.

Perhaps one could just decide for himself if he "feels" better if he's smiling as opposed to frowning, and further try to determine what effect each has on his patients, if any.

Peter Marshall, a former chaplain of the Senate who became more popular after his death because of the writings of his wife Catherine, once said, "If God doesn't have a sense of humor, then I'm a goner." That's been a favorite saying of mine through the years. Speaking anecdotally, happiness and laughter (especially at myself) has had positive medicinal effect on me.

Apparently, one of the "in" things in medicine especially if you are a resident, and most especially if you're a resident in some specialty other than Internal Medicine is to subscribe to, occasionally read from, but continuously quote from the prestigious *New England Journal of Medicine*.

One of our happier residents in Pediatrics brought to our attention at Journal Club the other day an article of considerable humorous value from the *NEJM* entitled "*English Our Second Language*" by Nicholas Christy, M.D.

Let me quote from this cleverly written article and hopefully, you will pick it up and read it in its entirety (NEJM Vol. 300: 17, page 979):

"Imagine a medical student, graduated two years ago with a degree in science or the humanities, perhaps with high honors. In his third or core clinical or major medical year, not yet having forgotten all that he learned in college, eager to apply his new "preclinical" erudition to patients, he has just started his clerkship in internal medicine. He goes on rounds. He goes on rounds again. And again. Something is wrong. He understands nothing of what is being said. He understood well enough the scientific material that flooded him in the first two years of medical school, but he can grasp very little now. After about a week he sees the trouble. What is spoken on rounds is not English.

"This discovery brings with it immediate relief. All that is necessary is to find out what language is spoken, what its name is, what is the grammar, what are its idioms, above all, what are its purposes. Like any other traveler in a foreign country, the freshman clinical clerk begins to absorb this new language and soon has slid with the ease of youth into its usages, repellent though they have seemed at first. He divines its aims. He learns it so well that when the clerkship is over, his facility may surpass his teachers. His linguistic thrusts, after three months of daily practice, may often leave his instructors gasping — and uninformed. The student has learned the passwords. He knows Medspeak.

"Medspeak is an Orwellian invention of interns and

residents, alingua franca: 'a spoken language used for communication among speakers of different and mutually unintelligible languages . . . used solely for limited purposes.' By this definition, Medspeak can be learned by anyone, even a medical student, just as anyone can learn Malay, Swahili, the commercial language of the Mediterranean littoral or the pidgin (business) English of the Chinese coast. The key words are 'communication' and 'limited.'

"Communicate' means 'give to another as a partaker, impart, transmit' to exchange thoughts; the Latin origin means 'shared,' a popular word in the social sciences today. How much giving and exchanging, how much transmitting and sharing can be done in Medspeak? Very little. The communication is limited."

"Michael Crichton has analyzed this common problem in medical writing. The disease is well established in Medspeak too. The signs are many. Most obvious is use of a big word when a small one will do. 'Symptomatology' is particulary good. It has six syllables. It has Greek origins. It is suitably cacophonous. It implies familiarity with Medspeak. Best of all, nobody knows what it means. Not even dictionaries: general ones say it denotes the brand of medicine dealing with the study of symptoms; medical ones define it as the complex of symptoms characterizing a disease. It doesn't matter. The word is usually used incorrectly, as a synonym for 'symptoms,' which would have been better in the first place, but that doesn't matter either, for 'symptomatology' has done its work. Used by a resident it frightens the attending. Used by a student it frightens everyone. It impresses. It chokes off difficult questions so that rounds can move on. It is a fine, big word.

"Another is 'armamentarium' also hexasyllabic but more humbly derived from Latin. But how appropriately derived — from the language of the warlike Romans. One imagines Caeser's legions with their baggage trains and arsenals and catapults. What a good word to convey the idea of an attack on patients. High-sounding, formal, frightening. A fine, big word.

"Medspeak also encourges the use of several words when one will serve. 'Prior to' is better than 'before.' The same student, the same resident who would never utter, 'The President prior to Jefferson was Adams,' or 'Prior to the National Institutes of Health Bethesda was a desert,' or Prior to the time I met you I didn't know what love was,' does not blush to say on rounds, 'Prior to admission . . . (PTA)' in every third sentence; or 'Prior to the hemoptysis there was dyspnea,' or 'Prior to the onset of melena the patient seemed well.' In English, 'before is simpler, better known, and more natural, and therefore preferable.' More natural in English, but we are not speaking English, we are speaking Medspeak, we are being learned. 'Thou shalt have no other gods before me' was good enough for God (Exodus 20:3). 'Thou shalt have no other Gods prior to me' is more rotund, better Medspeak any day."

There, I think you can get the gist of it. It's humorous but it also makes you think, which when you reflect on it should be the best of two worlds, i.e., and M.D. that because he's happy feels better. Because he feels better his patients do, because of the medicinal effects of his infectious blissfulness. And to top it off he's a person who can think through problems for the patient.

In closing, let me leave you with this priceless prescription that won't cost you one red cent but will reap you many benefits: "Keep Smiling."

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Reprinted from the *Escambia County Medical Society Bulletin*, June 1979. Dr. Wilson is President of the Escambia County Medical Society.

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**We can do anything for one day, so, just for today, let us be unafraid of life, unafraid of death which is the shadow of life; unafraid to be happy, to enjoy the beautiful, to believe the best. Just for today, let us live one day only, forgetting yesterday and tomorrow, and not trying to solve the whole problem of life at once.**

**Joseph F. Newton**

# He Who Pays the Piper Calls the Tune

James K. Conn, M.D.

I keep coming back to a recurring theme, perhaps because I am walking on both sides of the street and can look at subjects with a less personally-biased eye than was possible at one time. If I may be indulged a flight of metaphorical ideas, I should like to suggest that we doctors are playing a different ball game now and it is one which is played by an entirely new set of rules. The new rules were brought about because the fact of third party payment of medical bills created a brand new set of circumstances and a new set of problems that did not exist prior to the time that concept was accepted. And yet, the development of third party payment to its present pre-eminence has been so insidious that physicians in general exhibit the posture of the fabled ostrich with its head in the sand. We still pretend that the patients are governed by the same restraints as they were when responsible for their own bills on a one-to-one relationship with the doctor, the hospital, and other "providers." Also, we pretend that we doctors still practice as though we were on a face-to-face relationship with the patients and their financial obligations. This simply is no longer true. The public demands services they don't need and, I fear, doctors acquiese all too often because it is easier, it is defensive medicine, or (Heaven forbid) it is lucrative. I do not admit that I am betraying my profession by pointing out these observations which I have made and by criticizing certain practices which I believe to be detrimental to the medical profession. Doctors have characteristically considered any adverse comment about the profession or about a colleague, even when not a personal acquaintance, as a personal affront, an attack on self. Well, such criticism is part of the changed rules. Unfortunately, we haven't been part of the rule changing process and most of us have either been ignorant of the changes or have ignored them. The third party payors have found that the fiscal restraints that formerly existed in the provision of medical care are no longer operative. Therefore, some new control mechanisms had to be found. Up to a point the solution was fairly simple for the commercial carriers. Costs and premiums are tied together in a direct relationship and it is logical that if costs increase so do premiums. After all, profit is the motive but a point eventually must be reached at which premiums are no longer competitive, and that cannot be tolerated. In such a case services must be curtailed or payments sharply controlled. On the other hand with government programs, other factors are operative inasmuch as certain services are authorized (required, obligated) and a certain amount of money is provided from the public coffers to pay for them. The authorized services are almost always greater than that which the available money can purchase. It becomes imperative then, that steps be taken to assure that the services paid for are necessary and are actually provided. As Doctors we should endorse these requirements without reservation since the government has no source of money except that provided by Us and many million other "Usses." In spite of this, restraints placed on the payment for medical services by government programs is looked upon by many doctors as a personal assault and a questioning of their professional judgement. This should not be our attitude. It should be recognized that it is the duty of the payor to preserve fiscal integrity and is deserving of our assistance.

At this point the question must arise as to where I am heading. Here goes. The time is now here when the medical profession collectively and individually must recognize that the rules have changed for good, that patients and doctors are not governed by the same controls and motivations as they were in the days before third party intrusion. We have to recognize that there is potential for abuse of the system as it now exists that was not present a generation ago. Massive amounts of money are involved and those entities responsible for its disbursement are faceless, represented by detested computer print-outs. Assistance from the medical profession is needed to direct efforts aimed at prevention and detection of abuse. At the present time, criteria which have been utilized to spot instances of possible misutilization have been superficial and in most instances inappropriate. The information needed and available is almost unlimited, being present on computer histories of claims and payments for patients as well as those providing medical services. And yet those items which have been chosen to "flag" attention are the total dollars paid and the number of patients seen, hardly positive indicators of abuse. There is nothing programmmed which will "flag" those instances in which the care might be inappropriate or substandard. The necessity for such "flagging" illustrates to me the need to admit and recognize that the whole ball-game has changed. We are now being paid by computer. Many of us are fighting and denying this fact by means of

profound announcements about the responsibility of the patient for his own medical bill, the refusal to accept assignments, requiring the patient to deal directly with his "insuring agency," etc., but if one is honest and realistic, this is recognized as but a gesture. The times have passed these alternatives by. There are precious few patients who can even comprehend the intricacies of the reimbursement system and most have also passed the point of accepting personal responsibility. Third party responsibility is now almost universally accepted. In fact it is so obviously necessary that there are very few doctors who can argue against it even on philosophical grounds. Most of the objections result from the fact of inadequate payments and with this I finally reach the point where I can make my pitch.

As a starting point I have to believe that only a tiny number out of the total number of physicians are not ethical, honest, and desirous of practicing the best medicine of which they are capable. I believe that almost all physicians wish to give their patients the best of care without consideration of their ability to pay and are shocked by and abhor bad medical practice when confronted with it. At the same time this majority of good doctors is not militant, is reluctant to criticize or censure for fear of appearing arrogant, power hungry, or omniscient. They also recognize that medicine is not a precise science and that there is a place for honest variations in techniques and procedures, and they don't wish to appear to be playing God. There is awareness too, of great legal entanglements which can result if the utmost in care and delicacy is not used. This essentially places the profession in bondage to the few who are on the fringe ethically, morally, and academically. Now I return to the third party payors. They have recognized a problem because instances of apparent aberrant behavior appear in their systems constantly. In fact, it is only these instances that attract attention, thus giving them the false impression that most doctors are malutilizers. Guidance and direction are needed from the leaders of our profession in devising methods to detect and prevent abuse which are acceptable and appropriate, but before we can do that we have to accept the fact that the game rules are now different and that such a move is necessary.

"Laundry lists," criteria, standards, or call them what you will, are repugnant to most doctors at this time and the reason for this repugnance is the failure to admit that medical care is not always appropriate or proper and that the person paying the bill has the right as well as the duty to require that conditions of need and propriety be met. There is only one area from which can come such a determination of what is or is not proper medical care and that is the peer group. Even then, it is not possible to assure rightness. Only history can do that. It is possible, however, to define normal medical practice for the usual situations and thus establish usable criteria. Then, when a significant deviation from these criteria occurs, while not necessarily indicating aberrant practice justification should be required. Doctors, being fiercely independent souls that they are, will resent this but the precedent already exists. Forever they have been expected to be able to justify to the patient, his family, and to peers when required, a diagnosis, treatment, or diagnostic procedure. This has now gone one step further. If some service falls outside the norm of medical practice, then the one paying the bill demands that it be justified. Can we in clear conscience object?

Even the most reactionary among us must realize that it is no longer possible for people to assume responsibility unaided for the costs of their medical care. Let's face up to what this demands of us as doctors. Our professional organizations must be directed to start a study to determine what constitutes medical necessity, to define necessary surgery, and to outline the norms of medical care. It must be determined whether the old principles which have governed proper billing and pricing practices are still valid. If they are, then those principles should be restated in such clear language as to allow no misinterpretation. If not, then a new code should be drafted which would be operative in today's circumstances. This would be a formidable study and is one that would need to be ongoing. Data is being generated and stored every day which should assist in this evaluation but it needs broad medical insight for its proper utilization. This study will be done and these decisions will be made either with our help or without it. I believe that we still have a chance to maintain the dignity and credibility of the profession and to be able to use our training and judgment to determine good medical practice and eliminate the bad; however, it will require recognition that the problem exists and collaborative action among medical organizations, insurance carriers, and governmental agencies will be necessary. These are uncomfortable bedfellows, perhaps, but I am convinced that if we don't take the initiative it will be done anyway without our input.

James K. Conn, M.D.
Newsletter Editor
Capital Medical Society
Tallahassee

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Reprinted from The Capital Medical Society Newsletter #60, March 1979. Dr. Conn is Newsletter Editor, Capital Medical Society, Tallahassee.

# A Joint Statement of Policy by The Florida Pediatric Society and The Florida Academy of Family Physicians

1. All physicians should share their knowledge regarding patient care. All members of the Florida Pediatric Society interested in teaching should participate in the training of all physicians, including family practice residents, in child care. It is suggested that when this activity is a considerable part of the teaching doctor's day and when funds are available, some remuneration be made.
2. All patients are entitled to their free choice of physicians. A family should be allowed to choose a family physician for its adults and a pediatrician for its children.
3. It is recommended that seriously ill children under the care of a family physician get appropriate consultation.
4. The American Academy of Pediatrics has indicated that the care for infants, children, adolescents and young adults be considered within the province of pediatricians as well as within other appropriate specialties.
5. When appropriate and feasible, units in the hospital addressed to adolescent care should be established. In this hospital forum, all physicians with special expertise in this age group, including pediatricians, family physicians, surgeons, internists, obstetricians and orthopedists, could have patients within their area of expertise.
6. Physicians should be granted hospital privileges according to their training, experience and competence as long as they otherwise meet the criteria of the hospital for membership on the medical staff.
7. Dialogue between family physicians and pediatricians should be continued to resolve new problems as they arise and to avoid a public display of differences.

Bernard Kimmel, M.D., President
Florida Academy of Family Physicians

Thomas Greiwe, M.D., President
Florida Pediatric Society

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†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:
King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

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Final classification of the less-than-effective indications requires further investigation.

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Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. ADVERSE REACTIONS: Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention; blurred vision and tachycardia; palpitations; mydriasis; cycloplegia, increased ocular tension; loss of taste; headache; nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. DOSAGE AND ADMINISTRATION: Dosage must be adjusted to individual patient's needs.
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Product Information as of October, 1978.

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# Books Received

**Receipt of the following books is acknowledged. Medical readers interested in reviewing particular books are invited to address requests to the Book Review Editor. Following acceptance of a written review for publication, a reviewer may then retain the book reviewed for his personal or favorite library.**

**The Chemistry of Human Behavior** by Herbert L. Meltzer, Ph.D. 261 Pages. Illustrated. Price $17.95 (cloth). Nelson-Hall Publishers, Chicago, 1979.

**Cry Babel, The Nightmare of Aphasia and a Courageous Woman's Struggle to Rebuild Her Life** by April O. Armstrong. 252 Pages. Price $8.95. Doubleday & Company, New York, 1979.

**Annual Review of Neuroscience** with 31 contributing authors. 555 Pages. Annual Reviews, Inc., Palo Alto, California, 1979.

**Norethindrone, The First Three Decades** edited by Mary Jean Pramik. 100 Pages. Syntex Laboratories, Palo Alto, California, 1978.

**Botanical Dermatology** by John Mitchell, M.D. and Arthur Rook, M.D. 787 Pages. Price $39.50. Lea & Febiger, Philadelphia, Penn., 1979.

**Humanhood: Essays in Biomedical Ethics** by Joseph Fletcher. 204 Pages. Price $14.95 (cloth) $6.95 (paper). Prometheus Books, Buffalo, New York, 1979.

**Family Health in an Era of Stress** conducted by Yankelovich, Skelly and White, Inc. 192 Pages (plus packet). General Mills, Inc., Minneapolis, Minnesota, 1979.

**Correlative Neuroanatomy & Functional Neurology, 17th Edition,** by Joseph G. Chusid, M.D. 464 Pages. Illustrated. Price $12.00. Lange Medical Publications, Los Altos, California, 1979.

**The Heritage of Aviation Medicine, An Annotated Directory of Early Artifacts,** by Robert J. Benford, M.D. 122 Pages. Illustrated. Price $4.50. Aerospace Medical Association, Washington, D.C., 1979.

**Women Can Wait, The Pleasures of Motherhood After Thirty** by Terri Schultz. 191 Pages. Price $4.95. Doubleday & Company, New York, 1979.

**Clear Skin, A Step-by-Step Program to Stop Pimples, Blackheads, Acne** by Kenneth L. Flandermeyer, M.D. 211 Pages. Illustrated. Price $8.95. Little, Brown & Company, Canada, 1979.

**Instructions for Parents** by Matthew M. Cohen, M.D. 232 Pages. Price $22.50. Appleton-Century-Crofts, New York, 1979.

**Clinical Cardiology** by Maurice Sokolow, M.D. and Malcolm B. McIlroy, M.D. 718 Pages. Price $17.50. Lange Medical Publications, Los Altos, California, 1979.

**Review of Physiological Chemistry** by Harold A. Harper, Ph.D., Victor W. Rodwell, Ph.D., and Peter A. Mayes, Ph.D., D. Sc. 702 Pages. Price $14.50. Lange Medical Publications, Los Altos, California, 1977.

# Book Reviews

**Book Review Editor**

**F. Norman Vickers, M.D.**

**The Whys and Wherefores of Corporate Practice,** Third Edition, by Sheldon Gorlick, J.D., Editor and Principal Author. 179 Pages. Price not stated. Medical Economics Book Company, Oradell, N.J., 1978.

This book is a compilation of 18 articles previously published by Medical Economics. Mr. Gorlick is an attorney who divides his time between legal practice and editorial duties at Medical Economics. The articles have the usual crisp, readable style characteristic of that publication. An index is included. While this is not the definitive text on incorporation of a medical practice, it is a first-step to investigating the subject.

F.N.V.

**Medical Practice Management,** Revised Edition, by Horace Cotton. 355 Pages. Price not stated. Medical Economics Book Company, Oradell, N.J., 1977.

This book has 45 chapters with catchy titles such as, "Start Right: Go Where You're Needed," and "Time is Your Most Valuable Asset: Don't Waste It." Many readers of this review will be familiar with Horace Cotton's articles in Medical Economics. The book should be of interest to the physician new to private practice as well as the established physician. There is a section devoted to re-evaluation of the medical practice. It starts with, "Sizing Up Your Practice: Do it Regularly," and concludes with, "Sizing Up: Yourself and Your Practice Goals."

Mr. Cotton does not include the Problem-Oriented Medical Record in his chapters and there is no bibliography. There is an index. This book is concise, readable, and recommended.

F.N.V.

**Side by Side,** The Poetry of Dorothy and Louis Alper, 1979. 182 pages. Price $5.95. Olivant Press, Post Office Box 1409, Homestead, Florida 33030.

Readers of the JFMA have already seen some of the poetry of Dr. Louis Alper who has a general practice in Coral Gables. He and his wife Dorothy are to be congratulated for this volume of poems.

Talking about poetry is like talking about a kiss. Both must be experienced to get the full impact.

For this review, I have chosen to present one poem by each.

**TESTAMENT**

**Dorothy Alper**

*Do not mourn*
*When I am gone*
*Where all souls go*
*At end of day*

*Do not mourn*
*Rejoice*
*That I lived*
*That long long day,*
*That we had known friendship*
*That we had known happiness*
*That we had shared sorrow*
*That we had known love.*

*Do not mourn*
*Rejoice*
*That we had known*
*A long long day*
*Together.*

**CODE BLUE**

**Louis Alper, M.D.**

*The hospital halls, quiet in the middle of the night,*
*Suddenly stir with a rush of activity.*
*Over the paging system, a voice cries out*
*Code Blue — Code Blue — Code Blue.*

*Defibrillators, Respirators are rushed to the room.*
*Doctors, Nurses, work feverishly to start the heart.*
*Some make it. Some do not. Lillian didn't. Paul didn't.*
*They both died today of pulmonary emboli.*
*They were old. They suffered long.*

*She kissed me on the cheek this afternoon.*
*Dorothy sent him flowers yesterday.*
*Tonight I think of both of them.*
*Tomorrow I will start again and so will it be*
*until they cry Code Blue for me.*

*F.N.V.*

# Medical News Around the State

Dr. Howell

**James T. Howell, M.D., M.P.H.**, has been appointed Florida State Health Officer and Staff Director of the Health Program office. He succeeds E. Charlton Prather, M.D., M.P.H., who resigned to accept a position as Health Program Supervisor for District II.

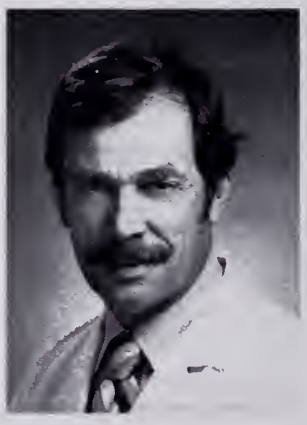
Dr. Howell, who previously served as Health Program Supervisor for District IX, is a Diplomate of the National Board of Medical Examiners and the American Board of Preventive Medicine, and is licensed in both Florida and New York. A graduate of St. Johns University, Dr. Howell was awarded his M.D. degree from New York Medical College in 1966, and a Master of Public Health degree from Harvard School of Public Health in 1972.

Dr. Howell maintains the position of Clinical Associate Professor in the Department of Epidemiology of the University of Miami School of Medicine, which he received while serving as Assistant Director of the Palm Beach County Medical Department (1972-1977). In addition, he moderates a 45-minute television program each week entitled "Medical Close-up."

Prior to undertaking his Public Health Residency with the Palm Beach County Health Department in 1969, Dr. Howell served two years in the U.S. Army as Chief of the Preventive Medicine Division at Ft. Sill, Oklahoma.

Dr. Howell holds membership and is active in many organizations including the FMA; AMA; American Public Health Association; Florida Association of County Health Officers; Palm Beach County Medical Society; Florida Society of Preventive Medicine; Alcohol and Drug Abuse Council; Mental Health District Board No. 20, Inc.; South County Mental Health Center; American Lung Association of Southeast Florida, Inc.; Health Planning Council, Inc.; Hospice, Inc.; Mid County Medical Center; and Migrant Health Services, Inc. He is also a member of the Palm Beach County Crippled Children's Society, Inc.; the Palm Beach County Emergency Medical Services Council; Palm Beach Junior College Advisory Committee; the Planned Parenthood Affiliate in Palm Beach County and the Visiting Nurse Association of Palm Beach County, Inc.

Dr. Howell and his wife Catherine, are the parents of two sons, David and James.


Dr. Eitzman

**Donald V. Eitzman, M.D.** . . . Chief of the Division of Neonatology at the University of Florida College of Medicine, has been named a Distinguished Service Professor. The special rank is the highest honor a teaching faculty member can earn at the University.

Dr. Eitzman joins a select group of 21 faculty members university-wide to achieve the honor for "outstanding accomplishments in teaching or service work" and for bringing "distinction, honor and fame to the University."

A graduate of the University of Iowa Medical School, Dr. Eitzman has been at the University of Florida for 21 years. He is Director of Shands Teaching Hospital's Neonatal Intensive Care Unit.

**Six Florida physicians** . . . were admitted to Fellowship in the American College of Physicians on March 23, according to Charles K. Donegan, M.D., of St. Petersburg, ACP Governor for Florida.

Dr. Donegan listed the new Florida Fellows as: Eugene L. Gitin, M.D., Miami; Arthur E. Heng, M.D., Stephen M. Kreitzer, M.D., and Dirk W. Suringa, M.D., all of Tampa; Frederick H. Roever, M.D., New Port Richey; and Mark J. Sweet, M.D., Fort Myers.

Dr. Humphrey

Dr. Young

**Two New Department Chairmen** . . . at the University of Florida College of Medicine have been announced by Dean William B. Deal, M.D.

Donald Humphrey, Ph.D., formerly Professor of Physiology at Emory University School of Medicine, has joined the College as Chairman of the Department of Neuroscience. Michael Young, M.D., formerly Associate Chairman of the Program for Cell Biology at Harvard Medical School, is the new Chairman of the Department of Biochemistry and Molecular Biology.

Dr. Humphrey earned his doctorate in neurophysiology and biophysics from the University of Washington in Seattle and has received many honors, including the Hans Berger research prize for outstanding research in cortical neurophysiology.

A 1959 graduate of Duke Medical School, Dr. Young received the Roche Award from the Duke University Medical Center in 1956 and received a U.S. Public Health Service Career Development Award for 1967-72.

**Henry Cooper, M.D.** . . . a Fort Lauderdale cardiologist, has been named Broward County's Doctor of the Year. The designation was made by the Caducean Society, an organization of 40 physicians dedicated to the advancement of medical science by exchange of knowledge and skills.

Dr. Cooper, a graduate of the University of Tennessee Medical School, was cited for his service to the North Broward Hospital District and for organizing and improving the cardiac units and other cardiovascular services at the three district hospitals.

**Albert L. Rhoton Jr., M.D.** . . . Professor and Chief of the Division of Neurological Surgery at the University of Florida College of Medicine, has been designated Chairman-Elect of the Section on Cerebrovascular Surgery of the American Association of Neurological Surgeons. The election came at the Association's annual meeting in Los Angeles.

**The American College of Radiology** . . . has announced that three Florida physicians will be inducted as fellows at its annual meeting and convocation in Chicago on September 19.

They were identified as Nathan R. Arenson, M.D., of Gulf Breeze; Ernesto A. Fonts, M.D., of Fort Lauderdale; and James M. Neill, M.D., of St. Petersburg Beach.

**The Medical Center Library** . . . of the University of South Florida in Tampa has received a three year $118,000 grant from the National Library of Medicine. The funds were earmarked for Tampa Bay Medical Library Network Development.

The network has been operational for three years, but the grant will allow it to have a central office in the Medical Center Library. Services to be offered include document delivery, reference, continuing education, and on-site supervision in basic unit libraries.

Thirteen institutions are in the network.

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# HOLD THESE DATES!!!

**SEPTEMBER 12-13-14, 1979**
*"PROGRESS IN CARDIOLOGY — 1979"*
Wolfson Auditorium at Mount Sinai Medical Center
Program Chairman — Philip Samet, M.D.

**OCTOBER 15-19, 1979**
*"FIFTH PANAMERICAN MEDICAL SEMINAR"*
*(Totally in Spanish)*
Wolfson Auditorium at Mount Sinai Medical Center
Program Chairman — Federico R. Justiniani, M.D.

**NOVEMBER 28, 1979**
*"PERPLEXING CARDIAC ARRHYTHMIAS IN PRIVATE PRACTICE"*
Wolfson Auditorium at Mount Sinai Medical Center
Program Chairmen — Marvin L. Meitus, M.D., and Neil Schneider, M.D.
Co-sponsored by The American Heart Association of Greatear Miami

**DECEMBER 5, 1979**
*"SLEEP DISORDERS UPDATE"*
Wolfson Auditorium at Mount Sinai Medical Center
Program Chairman — Martin A. Cohn, M.D.

For further information please write or call:
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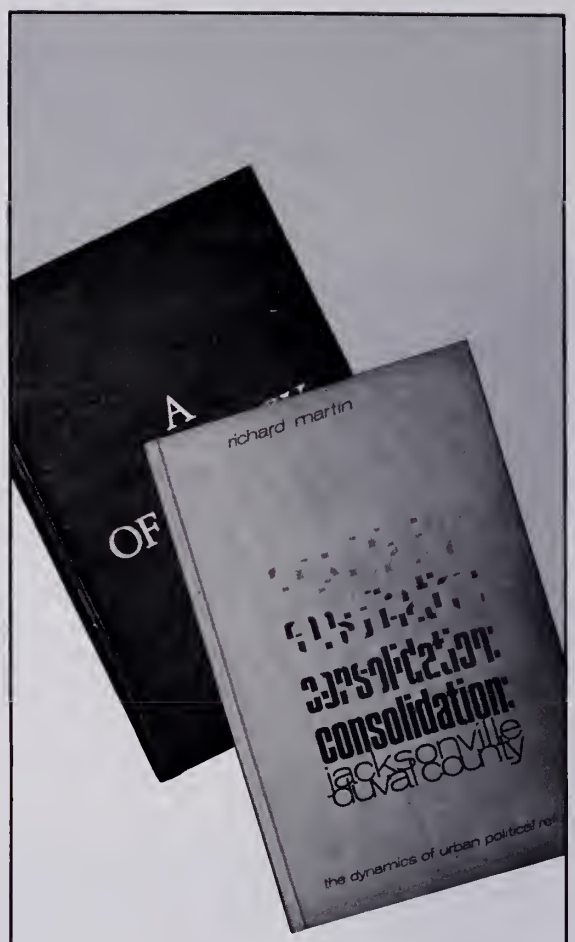


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# Deaths

**Brody, Benjamin S.**, Miami Beach; born 1890; New York Homeopathic, 1916; member AMA; died February 11, 1979.

**Chedid, Philippe Jr.**, Jacksonville; born 1947; French Faculty of Medicine, Beirut, 1973; member AMA; died January 31, 1979.

**Davis, Carl H.**, Miami; born 1883; Rush Medical College, 1909; member AMA; died February 21, 1979.

**Davis, Joseph W.**, Maitland; born 1895; Dalhousie University, 1924; died April 11, 1979.

**Driscoll, Frederick J.**, Ft. Lauderdale; born 1894; Ohio State University, 1917; member AMA; died January 13, 1979.

**Fogel, Norman A.**, N. Miami Beach; born 1933; Jefferson Medical College, 1958; member AMA; died February 24, 1979.

**Gurinsky, Abraham**, Miami; born 1923; University of Havana, 1948; member AMA; died March 7, 1979.

**Hayes, John W.**, Jacksonville; born 1905; Loma Linda University, 1930; member AMA; died February 12, 1979.

**Hibbs, Samuel G.**, Tampa; born 1906; University of Pittsburg, 1933; member AMA; died January 18, 1979.

**Johnson, Reginald H. Jr.**, Delray Beach; born 1919; Duke University 1949; member AMA; died February 10, 1979.

**Kummer, William M.**, Lakeland; born 1915; Hahnemann Medical College, 1941; member AMA; died February 28, 1979.

**Niswonger, Joseph K.**, Lakeland; born 1923; George Washington University; 1947; member AMA; died March 15, 1979.

**Pride, Atwell B.**, West Palm Beach; born 1916; Meharry Medical College, 1943; member AMA; died April 18, 1979.

**Robbins, Bernard L.**, Miami Beach; born 1910; New York Medical College, 1934; member AMA; died April 5, 1979.

**Robinson, Bryan W.**, Tallahassee; born 1929; Emory University, 1956; member AMA; died April 30, 1979.

**Seltzer, Joseph G.**, Orlando; born 1907; University of Toronto, 1933; member AMA; died May 2, 1979.

**Shaw, E. Clay**, Miami Beach; born 1896; Johns Hopkins University, 1921; member AMA; died March 26, 1979.

**Sory, Bailey B. Jr.**, Palm Beach; born 1899; Vanderbilt School of Medicine, 1925; member AMA; died March 21, 1979.

**Stein, Benjamin F.**, Sarasota; born 1915; University of Illinois, 1941; member AMA; died April 18, 1979.

**Watt, Edward C.**, Jacksonville; born 1903; Tulane University, 1933; member AMA; died January 30, 1979.

**Wright, Claude B.**, St. Petersburg; born 1904; Tulane University, 1929; member AMA; died March 25, 1979.

**Yantis, Earl E.**, Ocala; born 1924; Emory University, 1951; member AMA; died March 22, 1979.

**Young, L. Roland**, Daytona Beach; born 1893; University of Alabama, 1920; member AMA; died February 16, 1979.

**Zaugg, Frederick B.**, Coral Gables; born 1919; Colorado University, 1945; member AMA; died March 30, 1979.

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**Octubre 15-19, 1979**
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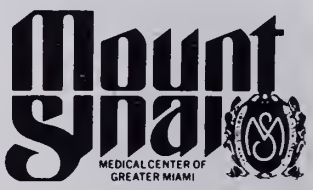


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**Profesores:**
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Horario: 9:00 a.m.-1:00 p.m. (Lunes a Viernes) 3:00 p.m.-5:00 p.m. (Lunes a Jueves)

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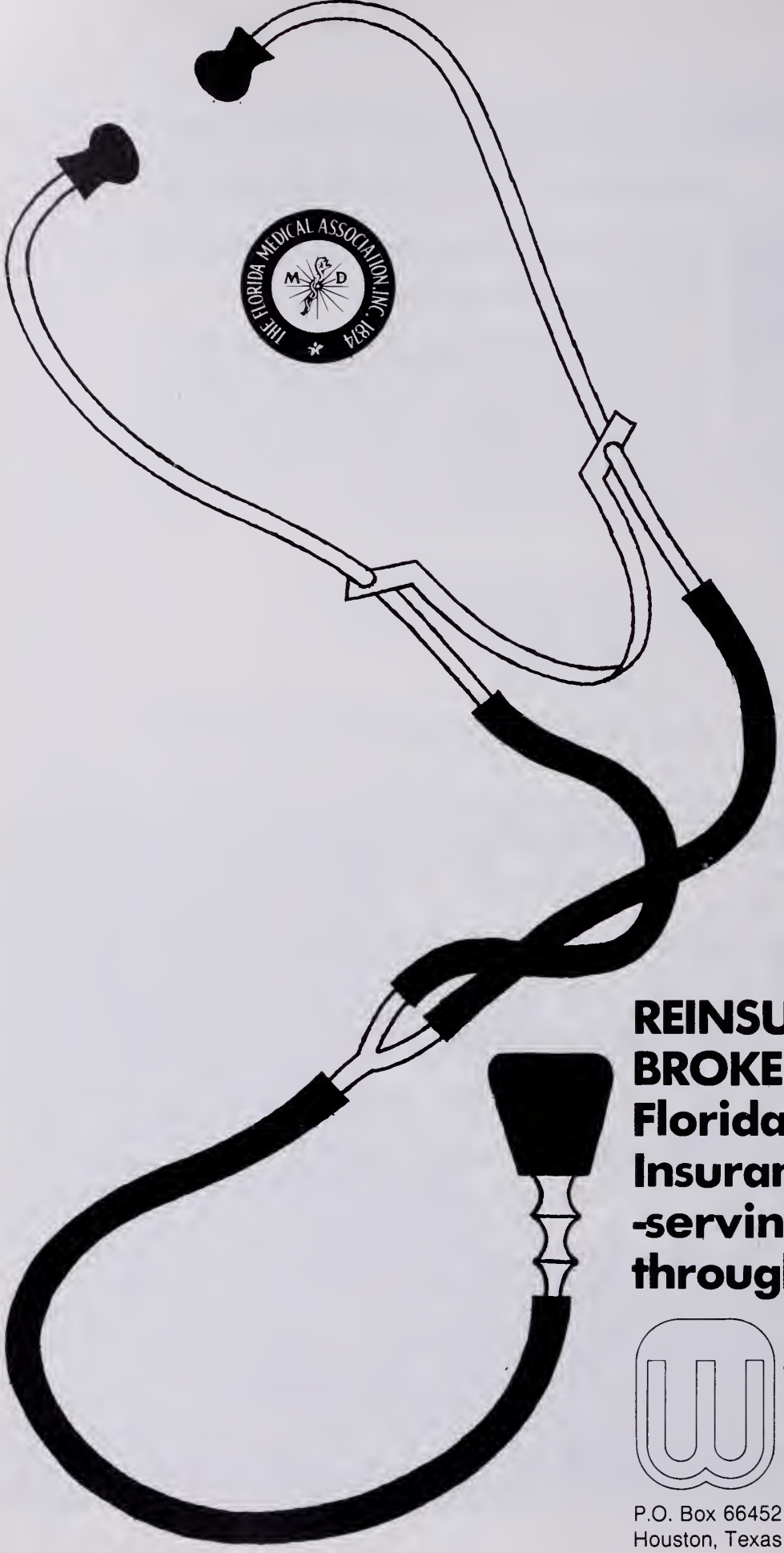


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# MEETINGS

## Approved by the FMA Committee on Continuing Medical Education

### OCTOBER

**Office Management Hypertension,** Oct. 3, Holiday-Inn—University Center, Gainesville.**

**Annual Meeting of the Society of Prospective Medicine,** Oct. 3-6, Don CeSar Hotel, St. Petersburg. For information: Ronald Blankenbaker, M.D., University of South Florida, College of Medicine, Dept. of Family Medicine, Tampa 33612.

**Considering Logo-Psychosomatic Medicine (Whole Person Medicine) and Quality of Life,** Oct. 3-7, Host Airport Hotel, Tampa. For information: William Standish Reed, M.D., 4823 Memorial Highway, Tampa 33614.

**19th Workshop in Electrocardiography,** Oct. 4-8, Clearwater Beach. Henry J. L. Marriott, M.D., St. Anthony's Hospital, St. Petersburg 33705.

**Hyperalimentation in Modern Hospital Practice,** Oct. 9, Manatee Memorial Hospital, Bradenton. For information: Leonides Y. Teves, M.D., 706 39th St. W., Bradenton 33505.

**Radiology for the Emergency and Primary Care Physicians,** Oct. 10-14, Sahara Hotel, Las Vegas, Nevada. For information: W. T. Haeck, M.D., 3900 N.W. 79th Ave., Suite 469, Miami 33166.

**Hypertension Update,** Oct. 11, Abbey Hospital Conference Room, Coral Gables. For information: Anthony J. Pellicane Sr., M.D.,5190 S.W. 8th St., Coral Gables 33134.

**M.D. Anderson Day: Yearly Cancer Update — 1979,** Oct. 12, Baptist Medical Center, Jacksonville. For information: C. M. Phillips, M.D., 800 Prudential Drive, Jacksonville 32207.

**Fifth Pan American Seminar,** Oct. 15-19, Wolfson Auditorium, Miami Beach. For information: Federico R. Justiniani, M.D., 4300 Alton Road, Miami Beach 33140.

**Rheumatology Review,** Oct. 18-20, Sonesta Beach Hotel, Key Biscayne. For information: Selden Longley, M.D., 615 N.W. 28th St., Gainesville 32610.

**Mercy Hospital Cardiovascular Symposium,** Oct. 18-20, OMNI International Hotel, Miami.*

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***For information: Contact Division of Continuing Medical Education, D23-3, University of Miami School of Medicine, P.O. Box 016960, Miami 33101. Tel. (305) 547-6716.**

****For information: Contact Division of Continuing Education, Box J-233, J. Hillis Miller Health Center, Gainesville 32610. Tel. (904) 392-3143, or 392-3183.**

**†For information: Contact Janifer M. Judisch, M.D., CME, University of South Florida, Tampa 33620. Tel. (813) 974-2074.**

**Current Concepts in Pulmonary & Infectious Diseases,** Oct. 19-20, Holiday Inn (The Casino), Pensacola Beach. For information: Richard D. Nauman, M.D., 5149 North 9th Ave., Suite 307, Pensacola 32504.

**Intraocular Lenses,** Oct. 20, St. Luke's Cataract and IOL Clinic, New Port Richey. For information: James P. Gills, M.D., St. Luke's Cataract and IOL Clinic, 118 High Street, New Port Richey 33552.

**Obstetrics and Gynecology Review Course,** Oct. 20-27, Royal Biscayne Beach Hotel & Racquet Club, Key Biscayne.*

**Ob-Gyn Pathology Course,** Oct. 27-28, Royal Biscayne Beach Hotel & Racquet Club, Key Biscayne.*

**Africa Safari Seminar,** Oct. 27-Nov. 10, Kenya, East Africa, For information: Dept. of Anesthesiology, Mt. Sinai Medical Center, 1200 N.W. 10th Ave., Miami 33136.

**Laparoscopy Course,** Oct. 29-30, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th Street, Jacksonville 32209.

### NOVEMBER

**EKG Interpretation and Arrhythmia Management,** Nov. 2-4, Don CeSar Beach Hotel, St. Petersburg. For information: Stephen E. Mattingly, 64 Inverness Dr. E., Englewood, Colorado 80112.

**Family Practice Weekend,** Nov. 2-4, Sheraton River Inn, Miami. For information: Stanley Sinclair, M.D., Dept. of Family Medicine, Box 016700, Miami 33101.

**10th Family Practice Review,** Nov. 5-9, Orlando Hyatt Hotel, Kissimmee.**

**Breast Cancer Therapy,** Nov. 6, Holy Cross Hospital, Fort Lauderdale. For information: Jon R. Fichtelman, M.D., P.O. Box 23460, Fort Lauderdale 33307.

**Current Therapies in Perinatology,** Nov. 11-18, University of Miami School of Medicine, Miami.*

**Update in Hypertension,** Nov. 13, Manatee Memorial Hospital, Bradenton. For information: Leonides Y. Teves, M.D., 706 39th St. W., Bradenton 33505.

**Common Pediatric Emergencies,** Nov. 15-17, Caribbean Gulf Hotel, Clearwater Beach. For information: Emergency Care Continuing Education Center, P.O. Box 9639, Marina Del Rey, California 90291.

**Pediatric Lung Disease Seminar,** Nov. 17, Memorial Hospital, Hollywood. For information: Tillinghast Lybass, M.D., 705 North Olive Ave., West Palm Beach 33401.

**Review & Overview in EEG,** Nov. 17-19, Hilton Hotel, Jacksonville. For information: Jacob Green, M.D., 2550 Park St., Jacksonville 32204.

**Laparoscopy Course,** Nov. 19-20, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th St., Jacksonville 32209.

**Review Course in Family Practice,** Nov. 26-30, Stone's Travelodge, Tampa. For information: Frederick Firestone, M.D., University of South Florida, College of Medicine, Box 13, 12901 N. 30th St., Tampa 33612.

**Perplexing Cardiac Arrhythmias in Private Practice,** Nov. 28, Mt. Sinai Medical Center, Miami Beach. For information: Esther Cohen, CME Coordinator, 4300 Alton Rd., Miami Beach 33140.

**Uveitis Symposium,** Nov. 29-30, Medical Center, University of South Florida, Tampa.+

**3rd Annual Medical Aspects of Aging,** Nov. 30-Dec. 1, Holiday Inn-University Center, Gainesville.**

## DECEMBER

**El Curso Interamericano: Temas Clinicos En Oftalmologia (In Spanish),** Dec. 3-7, Hotel Intercontinental, Miami.*

**Recent Advances in Treatment of Sleep Disorders,** Dec. 5, Mt. Sinai Medical Center, Miami Beach. For information: CME Coordinator, Mt. Sinai Medical Center, 4300 Alton Rd., Miami Beach 33140.

**Diabetes Update — 1979,** December 6, Curtis Hixon Convention Hall, Tampa. For information: R. V. Farese, M.D., University of South Florida, College of Medicine, Tampa 33612.

**Family Practice Seminar,** Dec. 6-8, South Seas Plantation, Captiva.*

**Neuro-Ophthalmology,** Dec. 6-8, Key Biscayne Hotel, Key Biscayne.*

**Pulmonary Function Studies,** Dec. 8, Holy Cross Hospital, Fort Lauderdale. For information: Jon R. Fichtelman, M.D., P.O. Box 23460, Fort Lauderdale 33307.

**Training Institute on Addictions,** Dec. 9-14, Deauville Hotel, Miami Beach. For information: The U.S. Journal of Drug and Alcohol Dependence, Inc., 2119-A Hollywood Blvd., Hollywood 33020.

**Fetal Monitoring,** Dec. 10-11, Sheraton Sand Key, Clearwater. For information: Jeanette T. Abich, R.N., Morton F. Plant Hospital, Box 210, Clearwater 33517.

**Hypertension,** Dec. 11, Manatee Memorial Hospital Auditorium, Bradenton. For information: Leonides Y. Teves, M.D., 706 39th St., W., Bradenton 33505.

**Ob-Gyn Ultrasound Seminar,** Dec. 12-16, Royal Beach Hotel & Racquet Club, Key Biscayne.*

**Laparoscopy Course,** Dec. 17-18, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th Street, Jacksonville 32209.

## 1980

## JANUARY

**Mid-Winter Cruise on Intensive Care,** Jan. 5-15, Aboard the "S/S DORIC".*

**17th Annual Postgraduate Seminar in Anesthesiology,** Jan. 10-13, Americana Hotel, Miami Beach. For information: Dept. of Anesthesiology, Mt. Sinai Medical Center, 1200 N.W. 10th Ave., Miami 33136.

**Law and the Emergency Department,** Jan. 11, Miami. For information: Emergency Medical Services Symposium, 3900 N.W. 79th Ave., Suite 469, Miami 33166.

**25th Annual Cardiovascular Seminar,** Jan. 11-12, Holiday Inn, Longboat Key. For information: E. Jerry Eatman, P.O. Box 12407, St. Petersburg 33733.

**Trinidad/Togago Seminar,** Jan. 13-20, Trinidad, West Indies. For information: Dept. of Anesthesiology, Mt. Sinai Medical Center, 1200 N.W. 10th Ave., Miami 33136.

**Second Annual Walt Disney World Pulmonary Wintercourse,** Jan. 14-18, Contemporary Resort Hotel, Lake Buena Vista. For information: Asher Marks, M.D., Chairman, Pulmonary Wintercourse Planning Committee, c/o Florida Lung Association, Box 8127, Jacksonville 32211.

**Second Annual Walt Disney World Pulmonary Wintercourse,** Jan. 14-17, Contemporary Hotel, Lake Buena Vista. For information: Asher Marks, M.D., Post Office Box 8127, Jacksonville 32211.

**Oral Pathology Review,** Jan. 16-18, University of Miami School of Medicine, Miami.*

**Art and Science in the Therapy of Difficult Problems in Surgery,** Jan. 16-19, Americana Hotel, Bal Harbour.*

**Gynecologic Surgery Symposium,** Jan. 20-25, Royal Biscayne Beach Hotel & Racquet Club, Key Biscayne.*

**Echocardiography In-Service Workshops,** Jan. 21-25, University of Miami, Jackson Memorial Medical Center, Miami.*

**Intensive Care for Neurological Trauma and Disease,** Jan. 24-27, Americana Hotel, Bal Harbour.*

**Far East Orient Seminar in Anesthesiology,** Jan. 26-Feb. 10, Philippines/Hong Kong/Thailand — Honolulu (optional). For information: Dept. of Anesthesiology, Mt. Sinai Medical Center, 1200 N.W. 10th Ave., Miami 33136.

**Pediatric Nephrology VII**, Jan. 27-30, Americana Hotel, Bal Harbour.*

**A Neurological Update**, Jan. 28-Feb. 1, Americana Hotel, Bal Harbour.*

**5th Annual Review and Recent Practical Advances in Pathology**, Jan. 28-Feb. 1, Americana Hotel, Bal Harbour.*

## FEBRUARY

**12th Annual Postgraduate Seminar in Adult & Pediatric Urology**, Feb. 6-9, Hotel Intercontinental, Miami. For information: Victor Politano, M.D., 6614 Miami Lakes Dr., East Miami Lakes 33014.

**National Burn Seminar**, Feb. 8-9, Gainesville Hilton, Gainesville.**

**Gynecologic Oncology Seminar**, Feb. 10-15, Royal Biscayne Beach Hotel & Racquet Club, Key Biscayne.*

**Glaucoma**, Feb. 14-16, Holiday Inn, Civic Center, Miami.*

**1st Annual Family Practice Update**, Feb. 18-22, Daytona Beach. For information: Ken Mead, Post Office Box 1990, Daytona Beach 32015.

**Nuclear Cardiology In-Service Workshop**, Feb. 18-22, University of Miami, Jackson Memorial Medical Center, Miami.*

**Florida Midwinter Seminar in Ophthalmology & Otolaryngology**, Feb. 24-Mar. 1, Bahia Mar Hotel, Ft. Lauderdale.*

**Teaching Conference in Clinical Cardiology**, Feb. 27-Mar. 1, Americana Hotel, Bal Harbour.*

**7th Annual Selected Topics in Urology**, Feb. 28-March 1, Gainesville Hilton, Gainesville.**

**Pediatric Dermatology Seminar**, Feb. 28-Mar. 2, Eden Roc Hotel, Miami Beach. For information: Guinter Kahn, M.D., 16800 N.W. 2nd Ave., Suite 401, North Miami Beach 33169.

**Ninth Annual Postgraduate Seminar in Dermatology**, Feb. 29-Mar. 2, Carillon Hotel, Miami Beach.*

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FAMILY PRACTITIONER: Excellent opportunity for physician to staff a new primary care medical clinic in northwest Florida 25 miles from four hospitals, serving an area of approximately 8,000 people. Mild climate, great hunting, fresh and salt water fishing, good schools, only 22 miles from the white sand beaches of the Gulf of Mexico, 26 miles from Panama City, Florida. New modern facility and trained staff provided at no expense to physician. The physician will have a salaried position with an option to buy or lease entire operation after establishment. Salary range governed by HEW grant with benefits (malpractice insurance paid, vacation etc.) Some latitude for salary adjustment as clinic use increases. Interested parties may send curriculum vitae (with recent photograph) to: L. A. Mathes, Wewahitchka Medical Center, P.O. Box 1156, Wewahitchka, Florida 32465 or call collect Mrs. Helen Armstrong (office manager) (904) 639-5828.

WANTED: Central Florida GP — regular or semiretired — supervise Physician Assistants in small health care facility. Excellent backup, no night or weekend calls. Contact L.C. Taylor, M.D., 320 Parkview Place, Lakeland, Florida 33801. Phone (813) 682-4913.

### SPECIALISTS

CENTRAL FLORIDA MULTI-SPECIALTY CLINIC HAS OPENING for second general surgeon. Good financial opportunity; new well equipped office near three hospitals. Write C-893, P.O. Box 2411, Jacksonville, Florida 32203.

MULTISPECIALTY GROUP OF PHYSICIANS located in North Florida seeking to expand in the following specialties: Rheumatology, Gastroenterology, Hematology/Oncology, Endocrinology, and Infectious Diseases. Please send curriculum vitae to: C-928, P.O. Box 2411, Jacksonville, Florida 32203.

EMERGENCY PHYSICIANS for position with young expanding group. Liberal salary package. Send CV to I. Bloomfield, M.D., Medical Director, P.O. Box 160132 Snapper Creek Station, Miami, Florida 33116 or call (305) 596-2896.

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EMERGENCY DEPARTMENT PHYSICIAN NEEDED to join established group. Short work week, malpractice paid, retirement plan in second year with Blue Cross/Blue Shield and life insurance. For further information contact: R. W. Carr, M.D., Route 3, Box 330, Ocala, Florida 32671.

GROUP OF SIX INTERNIST — SOUTH EAST COAST OF FLORIDA — Has opening for an Allergist or Dermatologist. Type of association to be determined by qualifications. Reply to P.O. Box 147, Lake Worth, Florida 33460.

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OB/GYN UNIQUE OPPORTUNITY. Need associate in well established, high quality, rapidly growing private practice in New Port Richey, Florida. New, fully equipped office, near three hospitals, walking distance to beach area and shopping centers. Terms negotiable. Contact G. G. Coquelet, M.D., 844 Gardens Drive, New Port Richey, Florida 33552.

LARGO MEDICAL CENTER is expanding its staff of specialties. In growing area. Florida license required. For interview call Andrew R. Mena, Administrator between 3-7 p.m. at (813) 391-0531 or send resume to P.O. Box 1091, Clearwater, Florida 33517.

## MISCELLANEOUS

### Situations Wanted

FAMILY PRACTITIONER, 31, board eligible, seeks group, associate, partnership or solo in southern Florida. Available February 1st. Florida license applied for. Please reply: 19781 Futura Drive, Yorba Linda, California 92686.

NEUROLOGIST, 35, board- eligible, seeks partnership, group or hospital-based practice in any part of Florida. Experienced in EEG, EMG, and CT. Randolph S. Geslani, M.D., 123 Santiago Ave., Rt. 14, Ft. Myers, Florida 33905.

ANESTHESIOLOGIST, Florida licensed, board eligible, wide experience in all anesthetic modalities, seeks practice opportunity in Florida. Prefer fee-for-service, other reasonable offers considered. Available July 1, 1979. Locum tenens with possible permanent association also considered. Phone: (516) 938-0474.

INTERNIST — PULMONOLOGIST, SEEKING solo, group or hospital based practice. Will consider buying practice. ECFMG. Available July 1979. Contact Dr. Malpani, 1165 Rte. 22, Apt. 22, N. Plainfield, N.J. 07061.

FAMILY PHYSICIAN Board certified, Florida license, over 25 years in practice plans to relocate to Florida and desires association with physician or medical group in Miami area. Reply to P.O. Box 1472, Landover, Maryland 20785.

SITUATION WANTED: OB/GYN, 28, U.S. schooled and trained, seeks group or partnership position on East coast. Will consider all offers. Write C-943, P.O. Box 2411, Jacksonville, Florida 32203.

### Practices Available

INTERNIST PRACTICE FOR SALE in Jacksonville. Equipment, office lease and patients charts. For further information write C-929, P.O. Box 2411, Jacksonville 32203.

FOR SALE: Active cardiology practice including office adjacent to hospital. Tampa Bay area. Contact Mr. Leveritt (813) 821-0648.

DERMATOLOGY PRACTICE, MIAMI, FLORIDA: expanding four year old practice. Excellent gross, surgically oriented, active in hair transplants. Fully equipped medical office building. Write C-944, P.O. Box 2411, Jacksonville, Florida 32203.

### Real Estate

OUTSTANDING LOCATION FOR SPECIALIST: St. Nicholas Medical Center. Central location, off street parking and all utilities furnished (including janitor service). Contact W. G. Allen, Jr., Owner-Manager, St. Nicholas Medical Center, 3127 Atlantic Boulevard, Jacksonville 32207. Phone: (904) 398-5500.

LAKELAND, FLORIDA: FOR SALE, 6% down. Air-conditioned office for one to three physicians. Main street, 168 x 140 ft.; double parking lots; extra cottage. Dr. L. Polskin, Box 15966, Honolulu, Hawaii 96815.

FLORIDA — (SOUTHEAST) — DELRAY: Offices for lease in single story medical plaza adjacent to Interstate-95; busy intersection and newly built convalescent center; tremendous opportunity to grow with a rapidly growing middle class community of single-family and condominium dwellings. Contact: Lawrence M. Landis, 900 S. Congress Ave., Delray, Florida 33445. Phone: (305) 278-0062.

JACKSONVILLE. 1,500 square feet, medically designed office available in newly refurbished Shops of Sherwood (northwest area of Jacksonville). A/C, ample parking. Located in stable, middle income residential community which needs medical doctor. Ideal for growing practice. Some equipment available. Start at $250 per month. Call collect (305) 446-4284.

26 ACRES OF WOODED LAND, North Carolina, Near Smokey Mountains. Four mountain streams. Surveyed into 1-2 acre lots for potential development. $36,000. Contact George Fink, M.D. (904) 733-1215.

BREVARD COUNTY (Cape Kennedy Area). Several outstanding office suites for lease and/or sale in Cocoa, Cocoa Beach, Titusville, and Melbourne. Can be tailored to individual or clinical needs. Contact: Trend Realty, Inc. Realtors, P. O. Box 39, Cocoa Beach, Florida 32931. Attention: Dudley Hain, Realtor-Associate, (305) 783-8686.

LONGWOOD — NEAR ORLANDO — CENTRAL FLORIDA: Offices for lease in Medical-Dental Park adjacent to Interstate 4 and 434. Excellent opportunity in rapidly growing middle class of single family developments. Suitable for GP, OB-GYN, Allergist, ENT or Ophthalmologist. Contact A. R. MacPherson, M.D., 331 N. Maitland Avenue, Maitland, Florida 32751 or phone (305) 645-1166.

CUSTOM DESIGNED MEDICAL OFFICE FOR SALE: 1,200 sq. ft. at professional office condominium park between Florida Hospital and Florida Hospital, Altamonte. Real Estate One, Inc., Realtor, 340 Maitland Avenue, Maitland, Florida 32751. Paul H. Gendron, Realtor/Associate. Phone (305) 644-6244. Evenings (305) 644-6865.

OWN YOUR OWN ISLAND: One of the oldest recorded islands (1885) in Lake T'sala Apopka. Approximately six high pristine acres of beautiful trees. One mile from Hernando, Citrus County. Untouched prime land, ideal family retreat, $49,900. Phone Tampa (813) 228-2594 days. Write Weston, 4250 Highway 544 North, Winter Haven, Florida 33880.

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- Action at urinary/vaginal/lower bowel sites helps eliminate reservoirs of infecting organisms
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- Low incidence of bacterial resistance in community practice
- Convenient *b.i.d.* dosage provides day-and-night antibacterial control
- Contraindicated during pregnancy and the nursing period. During therapy, maintain adequate fluid intake; perform CBC's and urinalyses with microscopic examination.

**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms:** *Escherichia coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris, Proteus morganii.* **It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination.** *Note:* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

**Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.**

The recommended quantitative disc susceptibility method (*Federal Register*, 37:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

**Contraindications:** Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers; infants less than two months of age.

**Warnings:** Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

**Precautions:** Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

**Adverse Reactions:** All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

**Dosage: Not recommended for infants less than two months of age.**

*Urinary Tract Infections:* Usual adult dosage—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

Recommended dosage for children—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. A guide follows:

*Children two months of age or older:*

| Weight | | Dose—every 12 hours | |
|---|---|---|---|
| lbs | kgs | Teaspoonfuls | Tablets |
| 20 | 9 | 1 teasp. (5 ml) | ½ tablet |
| 40 | 18 | 2 teasp. (10 ml) | 1 tablet |
| 60 | 27 | 3 teasp. (15 ml) | 1½ tablets |
| 80 | 36 | 4 teasp. (20 ml) | 2 tablets or 1 DS tablet |

For patients with renal impairment:

| Creatinine Clearance (ml/min) | Recommended Dosage Regimen |
|---|---|
| Above 30 | Usual standard regimen |
| 15-30 | ½ the usual regimen |
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*Pneumocystis carinii pneumonitis:* Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

**Supplied:** *Double Strength (DS) tablets*, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. *Tablets*, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10. *Oral suspension*, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole, fruit-licorice flavored—bottles of 16 oz (1 pint).

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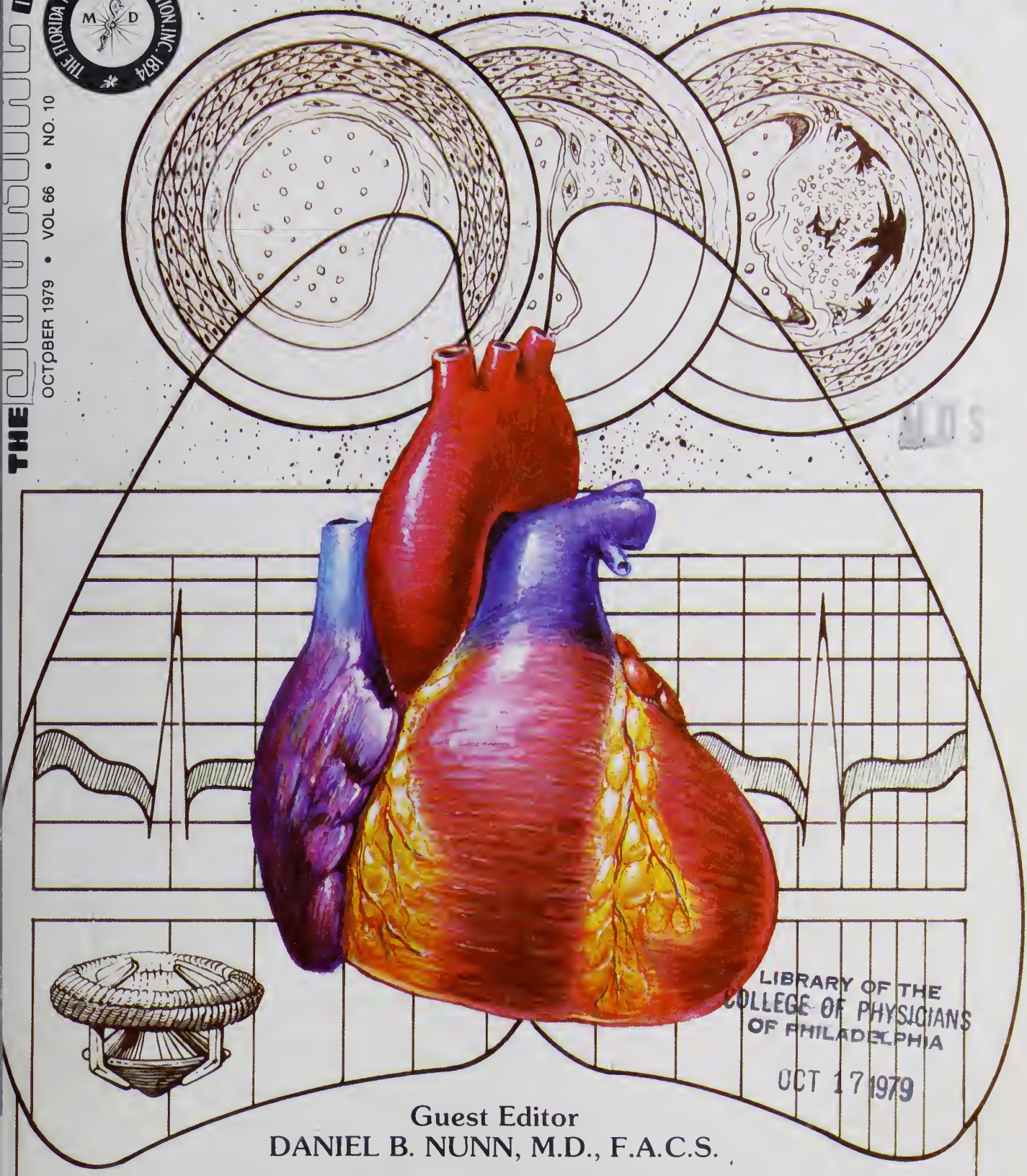

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# SPECIAL ISSUE ON THORACIC AND CARDIOVASCULAR SURGERY

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**Indications:** Relief of anxiety and tension occurring alone or accompanying various disease states. Efficacy beyond four months not established by systematic clinical studies. Periodic reassessment of therapy recommended.

**Contraindications:** Patients with known hypersensitivity to the drug.

**Warnings:** Warn patients that mental and/or physical abilities required for tasks such as driving or operating machinery may be impaired, as may be mental alertness in children, and that concomitant use with alcohol or CNS depressants may have an additive effect. Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported.

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

**Precautions:** In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

**Adverse Reactions:** Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

**Supplied:** Librium® Capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl. Libritabs® Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.

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### Special Issue on Thoracic and Cardiovascular Surger

**We are indebted to Dr. Daniel B. Nunn, of Jacksonville and the Florida Society of Thoracic and Cardiovascular Surgeons for bringing this special issue to our readers. We are also most grateful to the authors and contributors to this issue of The Journal. (See contents on opposite page).**

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The cover illustration was designed and drawn by Mr. Russell Jones, the medical illustrator for Cardiovascular Diseases: Bulletin of the Texas Heart Institute.

# SPECIAL ISSUE

## Thoracic and Cardiovascular Surgery

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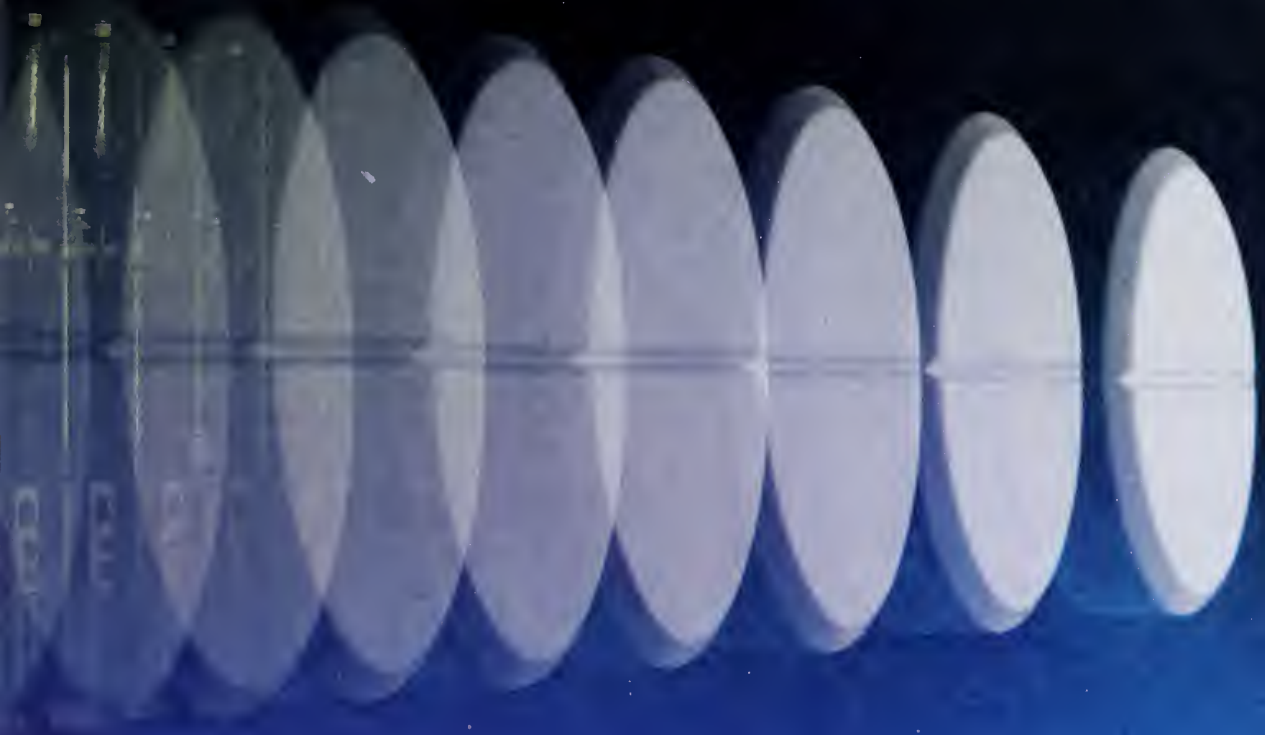

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*See following page for a brief summary of prescribing information.*

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**Indications:** Symptomatic relief and/or prevention of asthma and reversible bronchospasm associated with chronic bronchitis and emphysema.

**Contraindications:** THEO-DUR is contraindicated in individuals who have shown hypersensitivity to any of its components or xanthine derivatives.

**Warnings:** Excessive theophylline doses may be associated with toxicity; serum theophylline levels should be monitored to assure maximum benefit with minimum risk. Incidence of toxicity increases at serum levels greater than 20 mcg/ml. High blood levels of theophylline resulting from conventional doses are correlated with clinical manifestations of toxicity in: patients with lowered body plasma clearances, patients with liver dysfunction or chronic obstructive lung disease, and patients who are older than 55 years of age, particularly males. There are often no early signs of less serious theophylline toxicity such as nausea and restlessness, which may appear in up to 50% of patients prior to onset of convulsions. Ventricular arrhythmias or seizures may be the first signs of toxicity.

Many patients who have higher theophylline serum levels exhibit a tachycardia. Theophylline products may worsen pre-existing arrhythmias.

**Usage in Pregnancy:** Safe use in pregnancy has not been established relative to possible adverse effects on fetal development, but neither have adverse effects on fetal development been established. This is, unfortunately, true for most anti-asthmatic medications. Therefore, use of theophylline in pregnant women should be balanced against the risk of uncontrolled asthma.

**Precautions:** THEO-DUR TABLETS SHOULD NOT BE CHEWED OR CRUSHED. Theophyllines should not be administered concurrently with other xanthine medications. It should be used with caution in patients with severe cardiac disease, severe hypoxemia, hypertension, hyperthyroidism, acute myocardial injury, cor pulmonale, congestive heart failure, liver disease and in the elderly, particularly males, and in neonates. Great caution should be used in giving theophylline to patients in congestive heart failure since these patients show markedly prolonged theophylline blood level curves. Use theophylline cautiously in patients with history of peptic ulcer. Theophylline may occasionally act as a local irritant to G.I. tract although gastrointestinal symptoms are more commonly central and associated with high serum concentrations above 20 mcg/ml.

**Adverse Reactions:** The most consistent adverse reactions are usually due to overdose and are:

Gastrointestinal: Nausea, vomiting, epigastric pain, hematemesis, diarrhea.

Central Nervous System: Headaches, irritability, restlessness, insomnia, reflex hyperexcitability, muscle twitching, clonic and tonic generalized convulsions.

Cardiovascular: Palpitation, tachycardia, extrasystoles, flushing, hypotension, circulatory failure, life threatening ventricular arrhythmias.

Respiratory: Tachypnea.

Renal: Albuminuria, increased excretion of renal tubular cells and red blood cells; potentiation of diuresis.

Others: Hyperglycemia and inappropriate ADH syndrome.

**How Supplied:** THEO-DUR 100 mg, 200 mg and 300 mg Sustained Action Tablets are available in bottles of 100, 1000, and 5000, and in unit dose packages of 100 (20 x 5's).

**Caution:** FEDERAL LAW PROHIBITS DISPENSING WITHOUT A PRESCRIPTION.

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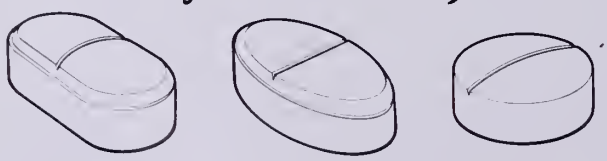

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ADMINISTRATOR

# The FMA Income Protection Plan

For the past 20 years, the Florida Medical Association has sponsored the Income Protection Program to help protect its members and their families from numerous financial problems total disability could cause. Since 1956, members have been able to purchase disability insurance through the program assuring them of an income if an accident or illness prevented their practice of medicine.

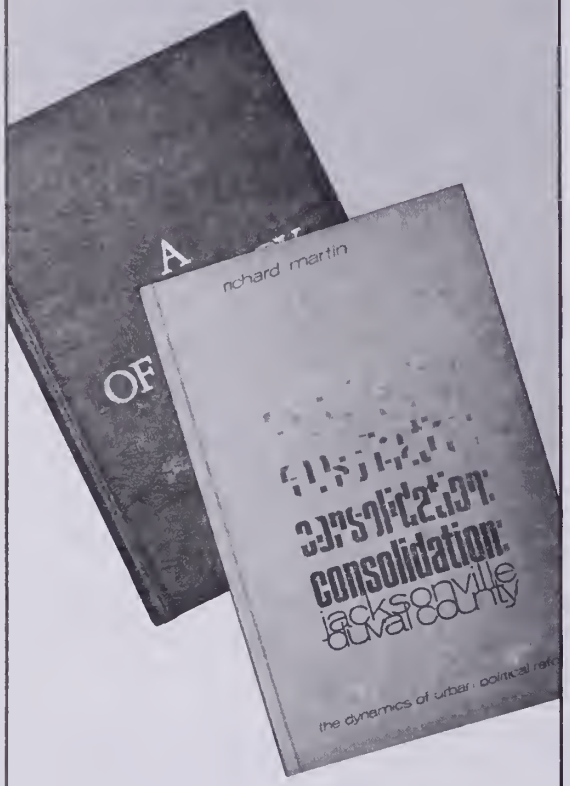
This program, underwritten by CNA Insurance's Continental Casualty Company of Chicago, is being updated to provide even more effective insurance protection for our members . . . protection which meets today's needs at the lowest possible premium rate.

The new Income Protection Program offers members a greater selection of coverage options. It provides benefits from $25 to $450 per week, beginning the 31st, 61st, 91st or 181st day of total disability. Members may also select between a plan which pays benefits for up to five years or one which pays benefits up to age 65. This wide variety of coverage options allows members to tailor plans to fit their personal situations. It also helps eliminate duplicate benefits, resulting in more comprehensive and economical coverage.

The insurance industry practice of allowing an insured to purchase coverage up to 60% of his or her income also has been adopted by our revised program. This figure, used industry-wide, is the spendable income received after taxes and other payroll deductions have been taken into consideration. Since disability benefits are tax-free, the 60% figure represents the amount of coverage needed to duplicate our member's "take home" salary. The company restricts its participation with other loss of time plans to a maximum of $3,500 monthly income.

The Florida Medical Association's disability program was revised only after a careful study revealed modifications were needed to stabilize and modernize the plan. The new Income Protection Program is better able to provide the coverage needed today, to meet the financial problems caused when an accident or illness results in total disability.

For further information concerning the Plan, contact
The Professional Insurance Management Company (PIMCO)

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## Tenuate® ⓓ
(diethylpropion hydrochloride NF)

## Tenuate Dospan®
(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

**INDICATION**: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

**CONTRAINDICATIONS**: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

**WARNINGS**: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect, rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle, the patient should therefore be cautioned accordingly. *Drug Dependence*: Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression, changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy*: Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children*: Tenuate is not recommended for use in children under 12 years of age.

**PRECAUTIONS**: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

**ADVERSE REACTIONS**: *Cardiovascular*: Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System*: Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache, rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal*: Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic*: Urticaria, rash, ecchymosis, erythema. *Endocrine*: Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System*: Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous*: A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

**DOSAGE AND ADMINISTRATION**: Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in midevening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.

**OVERDOSAGE**: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid resoiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.
Cayey, Puerto Rico 00633

*Direct Medical Inquiries to*
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Division of Richardson-Merrell Inc
Cincinnati, Ohio 45215, U.S.A.

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**References**: 1. Citations available on request from Medical Research Department, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon [Dillon], R.H., and Leyland, H.M.: A comprehensive review of diethylpropion hydrochloride. In, Central Mechanisms of Anorectic Drugs, S. Garattini and R. Samanin, Ed., New York, Raven Press, 1978, pp. 391-404.

**Merrell**

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# Overweight may not always be simple... complications can develop.*

# Complicated or not...

# Tenuate® Dospan® ©IV

## (diethylpropion hydrochloride NF)

**75 mg. controlled-release tablets**

### A useful short-term adjunct in an indicated weight loss program.

Overweight patients in certain diagnostic categories often require strict appetite control and a successful program of weight reduction may tend to diminish the incidence or severity of the complications in some patients. Diethylpropion hydrochloride has been reported useful in such patients and while it is not suggested that Tenuate itself in any way reduces the complications of overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. **Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.**

### In uncomplicated overweight.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

### Clinical effectiveness.

The anorectic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.[1] And the unique chemistry of Tenuate provides "...anorectic potency with minimal overt central nervous system or cardiovascular stimulation."[2] Compared with the amphetamines, diethylpropion has minimal potential for abuse.

## Tenuate—it makes sense. And it's responsible medicine.

*Studies have shown that obesity is associated with an increased incidence of hypertension, symptomatic heart disease, adult-onset diabetes, and other diseases.

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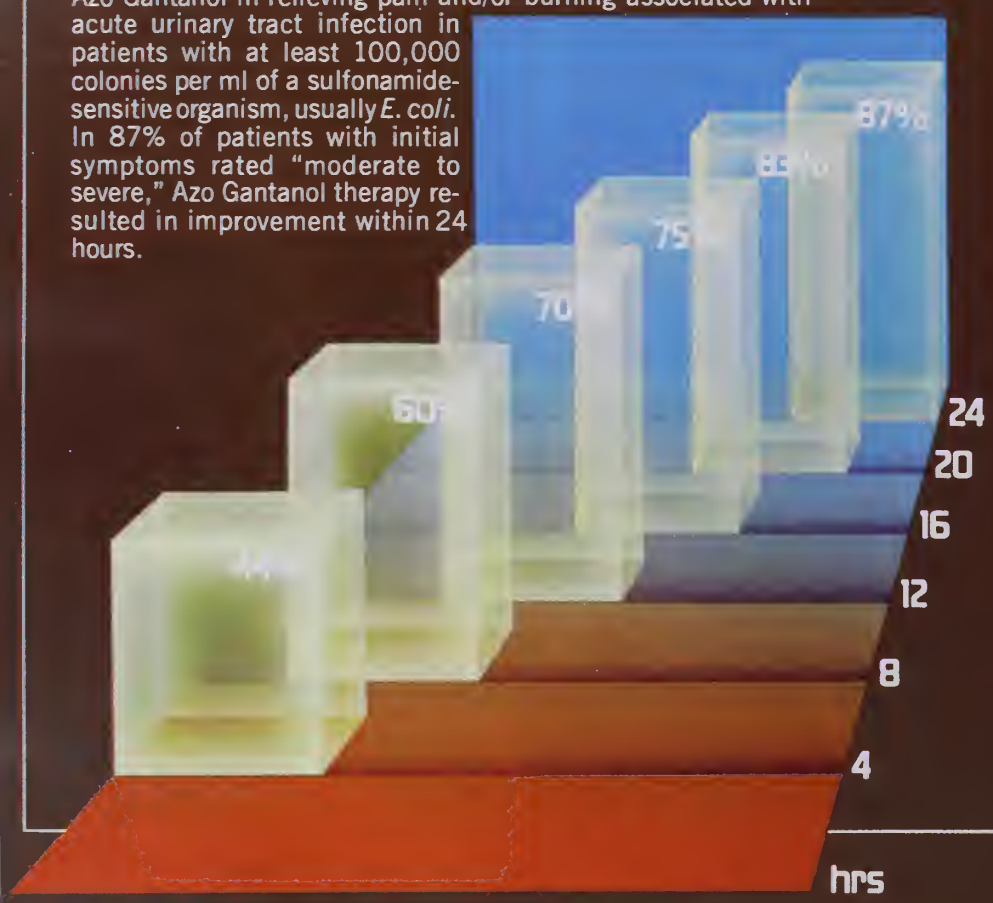
For prescribing information see opposite page.

## Important data on the pain of acute cystitis:

# In 87% of patients studied [303 of 349], Azo Gantanol® reduced pain and/or burning within 24 hours*

A controlled, multicenter study assessed the efficacy of Azo Gantanol in relieving pain and/or burning associated with acute urinary tract infection in patients with at least 100,000 colonies per ml of a sulfonamide-sensitive organism, usually *E. coli*. In 87% of patients with initial symptoms rated "moderate to severe," Azo Gantanol therapy resulted in improvement within 24 hours.




## Fast pain relief plus effective antibacterial action

# Azo Gantanol®

Each tablet contains 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl.

**for the pain** **for the pathogens**

*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey 07110.

**Before prescribing, please consult complete uct Information, a summary of which follow**

**Indications:** In adults, urinary tract infectio complicated by pain (primarily pyelonephri pyelitis and cystitis) due to susceptible org (usually *E. coli, Klebsiella-Aerobacter, Sta coccus aureus, Proteus mirabilis,* and, less quently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. **Note fully coordinate *in vitro* sulfonamide sensiti tests with bacteriologic and clinical respons aminobenzoic acid to follow-up culture med increasing frequency of resistant organisms the usefulness of antibacterials including su fonamides.** Measure sulfonamide blood leve variations may occur; 20 mg/100 ml should maximum total level.

**Contraindications:** Children below age 12; fonamide hypersensitivity; pregnancy at ter during nursing period; because Azo Gantan tains phenazopyridine hydrochloride it is co dicated in glomerulonephritis, severe hepat uremia, and pyelonephritis of pregnancy wi disturbances.

**Warnings:** Safety during pregnancy not esta Deaths from hypersensitivity reactions, agra tosis, aplastic anemia and other blood dysc have been reported and early clinical signs throat, fever, pallor, purpura or jaundice) m dicate serious blood disorders. Frequent CB urinalysis with microscopic examination are ommended during sulfonamide therapy.

**Precautions:** Use cautiously in patients wit paired renal or hepatic function, severe all bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in who dose-related hemolysis may occur. Maintai adequate fluid intake to prevent crystalluri stone formation.

**Adverse Reactions:** *Blood dyscrasias* (agran ulocytosis, aplastic anemia, thrombocytope leukopenia, hemolytic anemia, purpura, hy thrombinemia and methemoglobinemia); a *reactions* (erythema multiforme, skin erupti Stevens-Johnson syndrome, epidermal nec urticaria, serum sickness, pruritus, exfoliat dermatitis, anaphylactoid reactions, perior edema, conjunctival and scleral injection, sensitization, arthralgia and allergic myoca *G.I. reactions* (nausea, emesis, abdominal hepatitis, diarrhea, anorexia, pancreatitis a stomatitis); *CNS reactions* (headache, peri neuritis, mental depression, convulsions, a hallucinations, tinnitus, vertigo and insomn *miscellaneous reactions* (drug fever, chills, nephrosis with oliguria and anuria, periarte nodosa and L. E. phenomenon). Due to ce chemical similarities with some goitrogens, uretics (acetazolamide, thiazides) and oral glycemic agents, sulfonamides have cause instances of goiter production, diuresis and glycemia. Cross-sensitivity with these agen exist.

**Dosage:** Azo Gantanol is intended for the a painful phase of urinary tract infections. *Us adult dosage:* 2 Gm (4 tabs) initially, then (2 tabs) B.I.D. for up to 3 days. If pain per causes other than infection should be soug After relief of pain has been obtained, cont treatment with Gantanol (sulfamethoxazole be considered.

*NOTE:* Patients should be told that the ora dye (phenazopyridine HCl) will color the uri

**Supplied:** Tablets, red, film-coated, each co ing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl—bottles of 100 and 5

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ULLETIN FROM THE EVP'S OFFICE

FMA
gray paper

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AROLD PARHAM, D.H.A., EXEC. VICE PRES. / DONALD C. JONES, EXEC. DIRECTOR

September 12, 1979 No. 79-4

**The following is an abstract of a recent issue of the Gray Paper:**

**RECENT CHANGES TO THE WORKERS' COMPENSATION LAW** which were effective August 1, 1979, regarding medical treatment, are causing some confusion among physicians who treat workers' compensation cases. Here are ten points for the physician as an employer and as the attending physician.

1. The law requires the employer to furnish, to an injured employee, medical treatment, care and attendance for such time as the nature of the injury in the process of recovery may require.

2. When the employer fails to furnish medical treatment to an injured employee, the injured employee may seek medical treatment at the employer's expense.

3. The employee must advise the employer of his need for medical treatment (synonymous with the first report of injury). Knowledge by the employer of the injury or treatment may be sufficient notice to the employer.

4. The injured employee has the right to request a change of physician and the employer has a duty to select another physician unless the deputy commissioner decides that such a change of physician is not in the best interest of the employee.

5. There can be no coercion of the employee by the insurance company or the employer in the selection of a physician. Coercion can result in being found guilty of a misdemeanor of the second degree.

6. The time limit for filing a claim is two years from the date of last payment of compensation or the date of last remedial treatment.

- more -

CAPITAL OFFICE / 100 EAST COLLEGE AVENUE / TALLAHASSEE 32301 / (904) 224-6496
CENTRAL FLORIDA OFFICE / SUITE A-21, HOST INTERNATIONAL HOTEL / TAMPA 33622 / (813) 876-3488
SOUTH FLORIDA OFFICE / CENTRAL BANK BUILDING / 18350 N.W. 2nd AVENUE / MIAMI 33169 / (305) 652-6280

7. Doctors must report initial medical treatment of disabling injuries in workers' compensation cases within ten (10) days to the division and to the insurance company. Failure to make such a report may render claim for treatment invalid. All medical reports must be reported to the insurance company.

8. On medical only or first aid cases, the insurance company or employer, if self-insured, must report the cost of these medical claims to the division within sixty (60) days after the insurance company or employer, if self-insured, receives the notice of injury.

9. The employer or the insurance carrier is responsible for 100% of attorney's fees for failure to furnish medical treatment on medical only, or first aid claims, when the injured employee is successful in a claim for medical treatment aganist the insurance company or employer.

10. All medical reports received by employer, insurance company, or injured employee, or the attorney for any of them must be filed with the division within five (5) days of receipt.

**ERRATA PROCEDURE NUMBER** 15100 on page 56 in the 1975 Florida Relative Value Studies should reflect "45" follow-up days and not "0" as printed in the manual. Please make this correction in your 1975 Florida Relative Value Studies.

**COPIES OF STURGIS STANDARDS CODE** of Parliamentary Procedures are now available through AMA. Copies, $10 each, may be obtained by writing the AMA Order Department, Post Office Box 821, Monroe, Wisconsin 53566. The order number OP-76.

**AN AD HOC COMMITTEE ON WOMEN PHYSICIANS** in organized medicine is being appointed by AMA. The purpose of this one-year committee is to develop specific recommendations and mechanisms to insure the involvement of women physicians at all levels of organized medicine. Ms. Carla Neuschel, from the AMA Executive Vice President's Office, has been assigned to staff this committee.

**THE AMERCIAN SOCIETY OF ANESTHESIOLOGISTS HAS WON** out over the Justice Department in a four-year court battle. The ASA stood alone in challenging the government's claim that its relative-value guide amounts to price fixing. In his ruling, Federal District Judge Kevin T. Duffy denied the government's assertion that the ASA guide in and of itself constituded an anti-competition pact, contending that "a preponderance of the evidence does not support the existence of such an agreement, express or implied." He thus underminded not only Justice's case, but the core of FTC's position in wringing consent agreements from other medical societies -- agreements not affected by the ASA decision.

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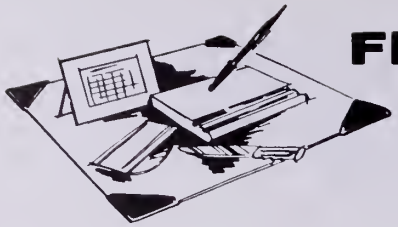


# FROM THE EDITOR'S DESK

## IMPORTANT LEGISLATION

Congressional action on important items of health legislation was scheduled in September as this issue of The Journal went to press. The House was to vote on the Administration's cost containment bill in watered-down form. Before Congress' summer recess, conferees ironed out most differences over the $72.4 billion HEW appropriations bill. Still to be resolved is the issue of eligibility for Medicaid-funded abortions.

## HEALTH PLANNING

Senate and House conferees have reached agreement on a three-year extension of the health planning program. Under the legislation states would be allowed to require certificate of need approval for major medical equipment in doctors' offices if the equipment is used for hospital inpatients.

## SECOND OPINIONS

An Administration witness has told the House Civil Service Subcommittee there is no evidence so far that mandatory second opinions for elective surgery would save money. The witness said a wait-and-see attitude should be taken toward several demonstration projects before implementing any national mandatory program. The Subcommittee is considering a proposal to require second opinions under the Federal Employee Health Plans.

## HMO REIMBURSEMENT

An Administration proposal for the reimbursement of Health Maintenance Organizations (HMO) has been questioned by the staff of the Senate Finance Committee. Reimbursement would be at 95% of the Medicar fee-for-service costs. Cautioning that the plan might cost more rather than save money, the Committee staff pointed out that "The HMO has a financial incentive to provide less services in order to keep a higher proportion of the revenues from the premiums." Concern was expressed that "wider participation of the elderly in HMOs not purchased with relatively high and imprecisely calculated capitation payments to HMOs who would be providing care primarily to the healthier segment of the older population."

## CME ACCREDITATION

The AMA is soliciting nominations for its new Committee on Accreditation of Continuing Medical Education. Creation of the new committee under the Council on Medical Education was directed after the AMA House of Delegates voted in July to withdraw entirely from the Liaison Committee on Continuing Medical Education (LCCME). Some of AMA's old partners in the LCCME, including the American Hospital Association, the Federation of State Medical Boards, and the Association for Hospital Medical Education, are among organizations being queried for nominations. In separating from LCCME, AMA resumed CME accreditation functions and delegated accrediting authority to state medical associations.

## FTC VS. MICHIGAN

The Federal Trade Commission is engaging in another bout with organized medicine. This time it has charged the Michigan State Medical Society with conspiring to fix or stablize fees. It was alleged that the society solicited proxies from members to authorize termination of Blue Cross, Blue Shield and Medicaid contracts if they did not adopt acceptable reimbursement policies. Said the society: "The MSMS will comply with federal law, but we will not give away our Constitutional freedoms which are threatened by the FTC complaint."

## VOLUNTARY EFFORT

An AMA-produced brochure on the work of the Voluntary Effort to control health care costs states that medical care is the least inflationary of major sectors of the economy. The publication, called "A Message to Members of Congress," says that medical care costs during the first half of 1979 rose only 4.3%, compared with a 6.8% increase in the all-items category of the Consumer Price Index. "Among major industries," it was pointed out "health care is the only one to voluntarily decelerate."

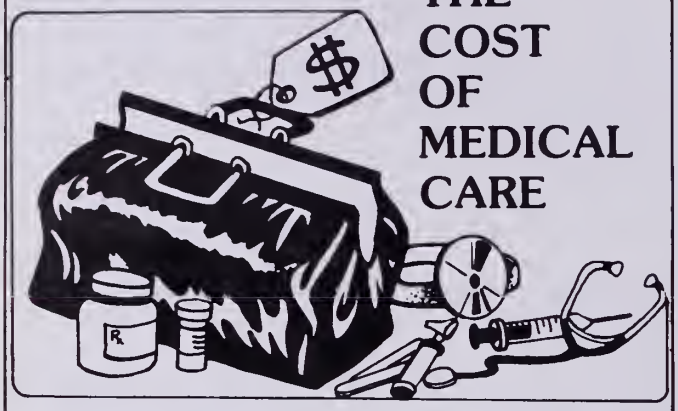
## CONTAINMENT PROGRAMS

State, metropolitan, county and national specialty societies are heavily committed to health care cost containment. Sixty-six percent of those responding in a recent survey are active in the Voluntary Effort, and more than half have organized cost containment committees. Two out of three of the organizations have adopted resolutions or policy statements supporting the 1978 plea by former AMA President Tom E. Nesbitt, M.D., for voluntary restraints.

**The Editor**

# MEDICAL MESSAGE

from the Florida Doctors



## THE COST OF MEDICAL CARE

Americans enjoy the best health care in the world. But for all the advances modern medicine has made, there is no antidote for the person who doesn't care about his own health.

By taking care of yourself — maintaining a sensible diet, not smoking, moderate drinking, regular exercise and controlling stress — you are making an investment in your future. Good health makes good sense financially too. Poor health can cost you money which may well have been saved through the practice of a little preventive medicine.

Advances have been made in health care which have saved thousands of lives, but this new technology costs money. Inflation has raised your living expenses, and the same is true of the things your doctor must buy — drugs, supplies, personnel and equipment. Compared to the increased prices of many goods and services you purchase regularly, health care is one of the best bargains available today.

In 1967, if you paid one dollar for doctor's fees, today you are paying $2.34. On the other hand, coffee that was a dollar in 1967 now costs $3.63, Social Security taxes are up to $3.08, postal fees are $2.57 and homeownership in 1967 now costs $2.41.

Your doctor should be thought of as your partner in the pursuit of good health . . . not the magic answer. Quality health care is not cheap, and it does not necessarily follow that purchasing more health care will result in improved health. The wisest solution is to make an individual effort to stay healthy by taking care of yourself.

For more information on what you can do for your health and to reduce the amount you spend on health care, write for a free pamphlet entitled *"Your Health is in Your Hands"* published by the Voluntary Effort, Post Office Box 2411, Jacksonville, Florida 32203.

*This is a medical message from the Florida Medical Association in behalf of the doctors of Florida and as a public service feature.*

**Brief Summary of Prescribing Information**

**Indications and Usage:** Symptomatic relief of anxiety, tension, agitation, irritability and insomnia associated with anxiety neuroses and transient situational disturbances; anxiety associated with depressive symptoms and as a treatment of symptoms of anxiety if such symptoms are a significant feature of functional or organic disorders, particularly gastrointestinal or cardiovascular.

Effectiveness in long-term use, i.e., more than 4 months, has not been assessed by systematic clinical studies. Reassess periodically usefulness of the drug for the individual patient.

**Contraindications:** Known sensitivity to benzodiazepines or acute narrow-angle glaucoma.

**Warnings:** Not recommended in primary depressive disorders or psychoses. As with all CNS-acting drugs, warn patients on lorazepam not to operate machinery or motor vehicles, and of diminished tolerance for alcohol and other CNS depressants.

Physical and Psychological Dependence. Withdrawal symptoms like those noted with barbiturates and alcohol have occurred following abrupt discontinuance of benzodiazepines (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Addiction-prone individuals, e.g. drug addicts and alcoholics, should be under careful surveillance when on benzodiazepines because of their predisposition to habituation and dependence. Withdrawal symptoms have also been reported following abrupt discontinuance of benzodiazepines taken continuously at therapeutic levels for several months.

**Precautions:** In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid oversedation.

Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may result in symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occasional convulsions.

Observe usual precautions with impaired renal or hepatic function.

Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular component.

Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg/kg/day. No effect dose was 1.25mg/kg/day (approximately 6 times the maximum human therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn within 2 months of first observation. Clinical significance is unknown; but use of lorazepam for prolonged periods and in geriatric patients requires caution and frequent monitoring for symptoms of upper G.I. disease.

Safety and effectiveness in children under 12 years have not been established.

ESSENTIAL LABORATORY TESTS: Some patients have developed leukopenia; some have had elevations of LDH. As with other benzodiazepines, periodic blood counts and liver function tests are recommended during long-term therapy.

CLINICALLY SIGNIFICANT DRUG INTERACTIONS: Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol.

CARCINOGENESIS AND MUTAGENESIS: No evidence of carcinogenic potential emerged in rats during an 18-month study. No studies regarding mutagenesis have been performed.

PREGNANCY: Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschisis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage. Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls. At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lower doses. Clinical significance of these findings is not known. However, increased risk of congenital malformations associated with use of minor tranquilizers (chlordiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided. Possibility that a woman of child-bearing potential may be pregnant at institution of therapy should be considered. Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug.

In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide.

NURSING MOTHERS: It is not known if oral lorazepam is excreted in human milk like other benzodiazepines. As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk.

**Adverse Reactions,** if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients, most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9%), weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, nausea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations. Incidence of sedation and unsteadiness increased with age. Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety.

**Overdosage:** In management of overdosage with any drug, bear in mind that multiple agents may have been taken. Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring of vital signs and close observation. Hypotension, though unlikely, usually may be controlled with Levarterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined.

**Ativan® IV for Anxiety (lorazepam)**

***Dosage:*** **Individualize for maximum beneficial effects. Increase dose gradually when needed, giving higher evening dose before increasing daytime doses. Anxiety, usually 2-3mg/day given b.i.d. or t.i.d.; dosage may vary from 1 to 10mg/day in divided doses. For elderly or debilitated, initially 1-2mg/day; insomnia due to anxiety or transient situational stress, 2-4mg h.s.**

***How Supplied:*** **0.5, 1.0 and 2.0mg tablets.**

**Wyeth Laboratories**
Philadelphia, PA 19101

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# Why one benzodiazepine and not another?

Are you concerned about long-acting metabolites? Many clinicians, as well as pharmacologists, are beginning to draw attention to this problem (see New England Journal of Medicine, April 5, 1979).

In contrast to some older benzodiazepines, Ativan (lorazepam) does not give rise to long-lasting active metabolites. As with all benzodiazepines, you should follow the usual precautions concerning co-administration with other CNS depressants and warn your patients against operating dangerous machinery and motor vehicles.

However, it is noteworthy that Ativan showed no clinical evidence of accumulation even when given in high doses over periods up to 6 months. The half-life of free lorazepam is about 12 hours; steady-state serum levels are attained in 2-3 days. Comparable data for diazepam: 20-50 hours and at least 7-10 days. (The pharmacokinetic profile of a drug can define such characteristics as absorption, distribution, metabolism and elimination but cannot, at present, be directly related to its therapeutic effectiveness.)

Ativan has a convenient b.i.d. or t.i.d. dosage schedule; it is compatible with a long list of other medications and, of course, it is a highly effective anxiolytic agent, as established in numerous nationwide, double-blind, controlled evaluations in thousands of patients.

See important information on preceding page.

**Ativan®** (IV)
**for** (lorazepam)
**Anxiety**

# Generics save money. Big money!

The FTC estimates that $400 million could be saved annually on the nation's Rx bill if physicians prescribed generics. Are you saving *your* patients extra dollars?

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# LEGISLATIVE NEWS

The 1979 Florida legislature enacted several bills of both direct and indirect interest to physicians of the State. The following summary of one of these new laws was prepared by the FMA Capital Office:

## Florida Mental Health Act (CS/HB 1632)

The revisions to the Florida Mental Health Act provided in this law include the following:

— Legislative intent is clarified to require the *least restrictive* means of intervention be employed when treating a mentally ill patient within the scope of available services.

— The term "physician" was changed to *"mental health professional"* and includes the following:

a. Florida licensed physicians and osteopaths who have primarily diagnosed and treated mental and nervous disorders for a period of not less than three years inclusive of psychiatric residency;
b. *A psychologist licensed pursuant to chapter 490, Florida Statutes, who has not less than one year of clinical experience post-licensure diagnosing and treating mental and nervous disorders.
c. In counties not having the above professionals, a physician or osteopath who has diagnosed and treated mental and nervous disorders.
d. Under certain circumstances, a registered nurse with a masters or doctoral degree in psychiatric nursing and two years of post-masters clinical experience under the supervision of a physician possessing the above stated experience in diagnosing and treating mental and nervous disorders.

— The Department of Health and Rehabilitative Services is given authority to contract for residential and non-residential services to be provided by receiving and treatment facilities.

— The time frame for review of patients for continued involuntary placement within private psychiatric facilities has been changed from 60 to 90 days.

— Patients held at receiving facilities for more than 12 hours are required to be given a physical examination within 24 hours of admittance.

— A lengthy section (394.459 (3)(a) has been added outlining requirements regarding a patient's consent to treatment.

— Rules are to be developed by HRS regarding reporting of patient abuse and patients are required to have access to information and a telephone for reporting alleged abuse.

— The criteria to be met for a court-ordered evaluation and for involuntary placement was changed as follows:

1. (no change) Likely to injure himself or others if allowed to maintain at liberty, or
2. (new language italicized) In need of care or treatment *which, if not provided, may result in neglect or refusal to care for himself and that such neglect or refusal poses a real and present threat of substantial harm to his well-being.*

— Human rights advocacy committees have been added as a resource for appointment as a patient's representative.

— The age limit for *voluntary* admissions for treatment has been removed. Parents or guardians may apply for treatment of children under 18 years of age, however, a hearing must be conducted to determine whether the application is voluntary.

— During procedures for a hearing on involuntary placement or retention in a treatment facility, the judge is required to make a determination regarding the patient's ability to consent to treatment. If found incompetent a guardian advocate is to be appointed.

The same requirement is made of the hearing officer in a hearing for continued involuntary placement.

*Note: The Psychological Practice Act (chapter 490, Florida Statutes) was repealed after review this legislative session. The effect of the repeal is not known at this time.

*(To Be Continued Next Month)*

# Dean's Page

# The Joys of the Academic New Year

**Hollis G. Boren, M.D.**

Many of the events that occur in medical schools and teaching hospitals from the middle of June to the middle of September constitute what may be called the Academic New Year. Medical students graduate and many residents finish their training programs. Fortunately, new students of medicine take their place. This is the time of the greatest turnover of these young men and women for whom the medical educational process is designed. But it is not the numbers of students involved, nor the pomp and circumstances of the occasion, or the "nitty gritty" problems of relocation that is the essence of this time. It is the joys and sorrows of the time that are ever so important.

The feelings of satisfaction of medical students and of pride in their family and friends when the M.D. degree is awarded give rise to a major celebration. I suspect that the feelings of faculty members also are ones of pride mixed with self-evaluation which asks if we could have done a better job. Rarely perhaps there may even be a feeling of relief. Most certainly there is a rather general letdown feeling.

The attitudes of residents who are completing their programs are similar but significantly different. They are older, wiser, and more realistic. There is also a more deep and silent feeling of fulfillment of goals and objectives. The sense of relief and happiness of their spouses and children is a pleasure to behold.

The feelings of the faculty as they watch the departure of students and residents is analogous to those experienced at the time when children leave home for college or establish their own distant family units. Things will never be the same again. The faculty has done all that it can and must be content to watch from the sidelines.

We can imagine the tragic state of affairs if this were the end of the scenario. Fortunately there is no end for the influx of new medical students and residents very rapidly provides an effective means of rejuvenating the faculty. It is like the time of the birth of a new baby and its addition to the family unit. There is going to be one whale of a lot of work and worry but the joys of the Academic New Year keep the whole process going.

Other words such as stimulus or challenge, regeneration, recycling, or even eternal hope might be used to describe the effect of new students and residents on the faculty. One thing is certain: were it not for the ever new contacts with these wonderful, bright young students who are willing to make continuing significant sacrifices to become the best physicians possible, there would be no medical education as we know it today.

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Dr. Boren is Director of the University of South Florida Medical Center and Dean of the College of Medicine, Tampa.

● Dr. Boren, University of South Florida, Tampa 33612.

The opinions stated on this page are those of the individual Deans and do not necessarily represent the policy of the FMA.

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# When painful spasm is the presenting symptom...

...in the functional bowel/irritable bowel syndrome*

# Bentyl®

## (dicyclomine hydrochloride USP)

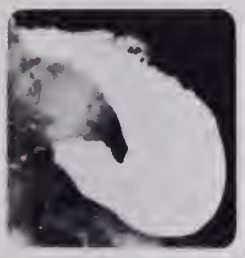
10 mg. capsules, 20 mg. tablets,
10 mg./5 ml. syrup, 10 mg./ml. injection

helps control abnormal motor activity
with minimal anticholinergic side effects†

Demonstrated smooth muscle relaxant activity.

In this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

. . . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.



Pylorospasm has almost totally blocked passage of barium meal.

Barium meal beginning to pass 10 minutes after intramuscular injection of 20 mg. Bentyl.

*"The correlation of spasm relief and drug given was excellent."*

*This drug has been classified "probably" effective in treating functional bowel/irritable bowel syndrome

†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:
King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

**Merrell**

8-4420 (Y736A) MNR-804

# Bentyl®

## (dicyclomine hydrochloride USP)

Capsules, Tablets, Syrup, Injection

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATIONS

Based on a review of this drug by the National Academy of Sciences–National Research Council and/or other information, FDA has classified the following indications as "probably" effective:

For the treatment of functional bowel/irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

CONTRAINDICATIONS: Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient; unstable cardiovascular status in acute hemorrhage; severe ulcerative colitis; toxic megacolon complicating ulcerative colitis; myasthenia gravis. WARNINGS: In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. PRECAUTIONS: Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with: Autonomic neuropathy. Hepatic or renal disease. Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon. Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. ADVERSE REACTIONS: Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention; blurred vision and tachycardia; palpitations; mydriasis; cycloplegia; increased ocular tension; loss of taste, headache; nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. DOSAGE AND ADMINISTRATION: Dosage must be adjusted to individual patient's needs.

*Usual Dosage:* Bentyl 10 mg. capsule and syrup: *Adults:* 1 or 2 capsules or teaspoonfuls syrup three or four times daily. *Children:* 1 capsule or teaspoonful syrup three or four times daily. *Infants:* ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg.: *Adults:* 1 tablet three or four times daily. Bentyl Injection: *Adults:* 2 ml. (20 mg.) every four to six hours intramuscularly only. NOT FOR INTRAVENOUS USE. MANAGEMENT OF OVERDOSE: The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine® (bethanecol chloride USP) should be used.

Product Information as of October, 1978.

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# Acknowledgement

*Editors gratefully acknowledge the generosity of the following contributors who helped make this Special Issue Thoracic and Cardiovascular Surgery possible:*

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## CONGRATULATIONS

Dear Dan:

This letter is to congratulate both *The Journal of the Florida Medical Association* and the Florida Society of Thoracic and Cardiovascular Surgeons for producing such a fine issue of *The Journal* devoted to thoracic and cardiovascular surgery. This issue of *The Journal* is highly informative both to individuals working in this field as well as the general membership of the Florida Medical Association.

Of particular interest to me as a professor of surgery in one of the medical schools is the fact that the specialists in the field of cardiovascular surgery in Florida have demonstrated their expertise and competency in the management of these very serious disorders. I personally think the State of Florida can be grateful for having these individuals practicing in its area and it should be comforting to know that this expertise is available on a local basis.

With heartiest congratulations to both *The Journal* and the Association upon their leadership in the field of cardiovascular surgery, I am

Sincerely yours,
*E. Stanley Crawford, M.D.*
*Texas Medical Center*
*Houston, Texas*

---

Dr. Crawford is President of The Southern Association for Vascular Surgery, Baylor College of Medicine, Houston.

Dear Dr. Nunn:

I wish to take this opportunity to congratulate *The Journal of the Florida Medical Association*, and The Florida Society of Thoracic and Cardiovascular Surgeons in cooperating in the publication of a special issue devoted entirely to thoracic surgery, including cardiac and noncardiac fields.

In these days of rapid and easy, though usually expensive, transportation to national and regional meetings the availability of professional meetings, and high level conferences on almost any topic is superb. Nonetheless, it is equally important that there also be easy availability of journals of wise distribution on a state or regional level, with frequent reviews of specialty fields. It is believed that this is equally important for the specialist in any given field, as well as the nonspecialist in that same field. It will allow the entire profession to have easier access to current knowledge in those spheres of medical practice which are not one's specialty, as well as those that are.

It is believed that such a special purpose journal will serve an admirable purpose.

With many congratulations on your foresight, I am

Sincerely yours,
*Edward F. Parker, M.D.*
*Professor and Acting Head*
*Division of Thoracic Surgery*
*Medical University of South Carolina*
*Charleston, South Carolina*

Dear Dr. Nunn:

The Florida Society of Thoracic and Cardiovascular Surgeons has done a memorable thing in arranging for an issue of *The Journal of the Florida Medical Association* to be devoted to thoracic and cardiovascular surgical topics.

The State of Florida encompasses a number of very eminent cardiothoracic surgeons. I am sure this issue, representing their work, will be prestigious.

The additional contributions of experts from other parts of the country, such as Dr. Tom Ferguson, Dr. Harold Urschel and Dr. Denton Cooley will add additional scientific and human interest.

I congratulate you upon this innovative and educational activity.

Sincerely,
*John W. Kirklin, M.D.*
*Professor and Chairman*
*Department of Surgery*
*University of Alabama*
*Birmingham, Alabama*

---

Dr. Kirklin is President, American Association for Thoracic Surgery 1978-79.

Dear Dr. Nunn:

I am delighted to learn that the Florida Society of Thoracic and Cardiovascular Surgeons is sponsoring a special issue of *The Journal of the Florida Medical Association* devoted to thoracic and cardiovascular surgery.

You and your colleagues have devoted much time and effort to this important undertaking and are to be congratulated. Of particular significance is the quality found among the authors whom you have selected for contributions. The fine work which you and your colleagues have done in the preparation of this issue is exemplary and establishes a standard for other similar groups to follow in making significant contributions to the field of thoracic and cardiovascular surgery.

With hearty congratulations and best wishes.

Sincerely yours,
*David C. Sabiston Jr., M.D., Chairman*
*Department of Surgery*
*Duke University Medical Center*
*Durham, North Carolina*

---

Dr. Sabiston is Editor-in-Chief of the Annals of Surgery.

Dear Dan:

It is with a great deal of pleasure that I write this letter of congratulations and appreciation to the Florida Society of Thoracic and Cardiovascular Surgeons for the special issue of *The Journal of the Florida Medical Association.*

It is entirely fitting that the wealth of talent in Thoracic and Cardiovascular Surgery from Florida be drawn together to contribute these articles for the benefit of Florida as well as the rest of the country.

Only those who have been involved in such an undertaking can appreciate the time and energy required to accomplish this task.

I congratulate the coordinator as well as the contributors and anticipate with pleasure the opportunity to peruse this work.

Sincerely,
*A. Robert Cordell, M.D., Chairman*
*Wake Forest University Cardiothoracic Surgery*
*Bowman Gray School of Medicine*
*Winston-Salem, North Carolina*

Dear Dr. Nunn:

May I offer my congratulations to you and the Florida Society of Thoracic and Cardiovascular Surgeons for sponsoring the special issue of *The Journal of the Florida Medical Association.* This issue devoted to thoracic and cardiovascular surgical topics represents an epoch accomplishment for a state surgical specialty organization.

With the fine list of contributors and the wide range of topics, this issue should offer an excellent clinical update to everyone both in and out of the thoracic specialties. In this day of increased emphasis on continued medical education, this summary of cardiothoracic surgical progress should be very welcome.

Again, with my congratulations and best personal regards.

Sincerely,
*Watts R. Webb, M.D.*
*Professor and Chairman*
*Department of Surgery*
*Tulane University*
*New Orleans, Louisiana*

Dear Dan:

I wish to congratulate the Florida Society of Thoracic and Cardiovascular Surgeons and *The Journal of the Florida Medical Association* on the publication of an issue devoted to thoracic and cardiovascular surgical topics. It is especially appropriate for Florida to have insight into carrying this out. Some of the pioneers in these fields are Floridians and Florida, more than any other state in the union, has taken on the task of rendering appropriate medical care to many of the geriatric patients of the United States.

I am impressed with the subject material covered and the authors of these publications. I am sure this will represent a memorable issue for the Florida Medical Association.

Best regards,
*George Johnson Jr., M.D.*
*Roscoe B. G. Cowper Professor of Surgery*
*Chief, Division of Vascular Surgery*
*University of North Carolina*
*Chapel Hill, N.C.*

# Special Issue On Thoracic and Cardiovascular Surgery

## Guest Editor

**Daniel B. Nunn, M.D.**

### Introduction

Approximately one and a half years ago, the Florida Society of Thoracic and Cardiovascular Surgeons accepted the challenge to produce a specialty issue of the *JFMA*. Publication of the October, 1979, issue devoted to Thoracic and Cardiovascular surgical topics marks the culmination of this undertaking.

In the selection of topics and preparation of articles, an effort was made to provide information of interest to the FMA membership as a whole. Hence, the special issue encompasses a variety of subjects including a timely discussion of socioeconomic factors relative to the specialty of thoracic surgery *(The Thoracic Surgeon in the World Today)*. Through the courtesy of one of the state's pioneer thoracic surgeons (Dr. Hawley Seiler), the reader is afforded a brief history of Thoracic Surgery in Florida. Scientific papers concerned with pulmonary, esophageal, cardiac, and peripheral vascular surgery generally offer a *precis* of current knowledge and a description of new procedures, both diagnostic and therapeutic.

Aside from three guest articles by distinguished out-of-state surgeons (Dr. Thomas Ferguson, past President of the Society of Thoracic Surgeons; Dr. Harold Urschel, President of the Southern Thoracic Surgical Association; and Drs. Ott and Cooley of the Texas Heart Institute), manuscripts were written by members of the sponsoring Florida Society. It is particularly fitting that the list of authors includes staff physicians from all three medical schools within the State.

The illustration for the Journal cover was designed and drawn by Mr. Russell Jones, the Medical Illustrator for *Cardiovascular Diseases: Bulletin of the Texas Heart Institute*. In the cover illustration, the artist depicted several items frequently associated with Thoracic and Cardiovascular Surgery (i.e., the ECG, a prosthetic heart valve, the progressive stages of arteriosclerosis, and the lungs). The interrelationship of these items is reflected by the outline of the lungs which courses its way through each element of the drawing.

As this project nears completion, the guest editor wishes to express his sincere appreciation for the support rendered by the Editorial Staff of the JFMA (especially Dr. Gerold Schiebler, Dr. Clyde Collins, Dr. Richard Dever, Mr. Edward Hagan, and Mrs. Louise Rader); the Society's fund-raising Committee for the Special Issue (Dr. Robert Welch, Dr. Robert Trumbo, and Dr. Parry Larsen); the financial contributors; and the physicians who submitted articles.

**Dr. Nunn**

THE JOURNAL
OF THE FLORIDA MEDICAL ASSOCIATION INC
OCTOBER 1979
VOL 66 • NO. 10

# The Thoracic Surgeon in the World Today

**Thomas B. Ferguson, M.D.**

*"The best doctor is often the one of whom the public hears the least; but nowadays, in the fierce light that beats upon the hearth, it is increasingly difficult to lead the secluded life in which our best work is done." Dr. William Osler to the graduating class at the University of Toronto Medical School, 1903.*

I appreciate Dr. Nunn's invitation to write an article dealing with socioeconomic issues in thoracic surgery. Topics that seem to merit discussion are manpower, recertification, and the various medicine-government interfaces. First, however, it seems pertinent to review briefly the changes that have occurred in organized medicine in the last 15 years, for it is through this new structure that our specialty must deal with many of these issues.

Following the 1966 recommendation of the Millis Commission, there are now five national organizations which speak for the private sector of medicine (Table 1). These are the American Board of Medical Specialties (ABMS), the American Hospital Association (AHA), the American Medical Association (AMA), the Association of American Medical Colleges (AAMC), and the Council of Medical Specialty Societies (CMSS). Let us look at these organizations for a moment to see where the individual thoracic surgeon and our specialty have input.

The American Board of Medical Specialties (ABMS) consists of representatives from each of the 22 medical specialty boards. The American Board of Thoracic Surgery, with members from the American Association for Thoracic Surgery and the Society of Thoracic Surgeons (4 each), the American Surgical Association (3 each), and from the American College of Surgeons and the American Medical Association (2 each), is an active contributing member to the ABMS.

The American Medical Association structure with local, state and national medical societies is well-known to all of you. It should be pointed out that while the Millis plan in effect supercedes a position occupied solely by the AMA heretofore, this does not lessen the importance of the AMA as a necessary and effective spokesman for the practicing physician. Prior to 1978 specialty medicine had a minimal role in the formation of AMA policy. However, in December, 1977, the AMA House of Delegates voted to permit direct representation for specialty societies, and at this date 54 societies have been recognized for 1 seat each in the House of Delegates. Thoracic surgery is represented by the AATS and the American Thoracic Society.

The Council of Medical Specialty Societies (CMSS) consists of representatives from 23 specialty organizations. A condition of membership is that the specialty be represented by a primary or conjoint Board in the ABMS.

Dr. Ferguson is Clinical Professor of Surgery, Division of Cardiothoracic Surgery, Washington University School of Medicine, St. Louis, Missouri, and Past President of the Society of Thoracic Surgeons.

The specialty organization with the greatest number of practicing physicians is customarily selected. The Society of Thoracic Surgeons represents our specialty in the CMSS.

The Association of American Medical Colleges is divided into three Councils. Two thoracic surgery representatives sit on the Council of Academic Societies, one from the American Association for Thoracic Surgery and one from the Thoracic Surgery Program Directors Association.

Thoracic surgery as a specialty has no direct input into the American Hospital Association.

The Coordinating Council on Medical Education (CCME) (Table I) is a supervisory and coordinating body consisting of three representatives each from the five organizations mentioned above, plus a public member and a Federal member. The CCME is responsible for supervising and coordinating the accreditation process in medical education, and for developing and publishing for organized medicine policy statements which have the approval of all parent organizations. The Coordinating Council functions like the Security Council of the United Nations, in that one negative vote on a policy matter by any parent organization is sufficient to block adoption.

The three liaison committees are responsible for accreditation in medical education (Table I).

(1) The Liaison Committee on Medical Education (LCME) is responsible for accrediting medical schools.

(2) The Liaison Committee on Graduate Medical Education (LCGME) is responsible for accrediting post-graduate training programs. Training programs in thoracic surgery are reviewed periodically by the Residency Review Committee (RRC) for Thoracic Surgery, a tripartite committee with representation from the American Board of Thoracic Surgery, the American College of Surgeons and the AMA. If the program meets the criteria set forth in the Essentials of Accredited Residencies, it is **approved** by the RRC. The LCGME then reviews the action of the RRC and if it concurs, **accredits** the program. This accrediting mechanism has been criticized as adding another bureaucratic layer above the RRC, which prior to the establishment of the LCGME was both the approving and accrediting body. However, LCGME accreditation provides several advantages over the previous mechanism. The LCGME ultimately, and where applicable, will standardize requirements in the various specialties, which under the RRC system have been widely divergent. The LCGME also provides a "due process" mechanism for the program director, should he disagree with the ruling of either the RRC or the LCGME. This is not only important from the concept of fair play, but also from the viewpoint of the consumer, since it provides a check-and-balance mechanism that removes the RRCs from a judge-and-jury posture. This accrediting procedure has been in operation only 6 years, and there are a number of glitches that still must be resolved. Two problem areas are the costs of and the delays in accreditation.

(3) The Liaison Committee on Continuing Medical Education (LCCME) is responsible for accrediting continuing education programs. The latest of the organizations to be chartered, it will assume increasing

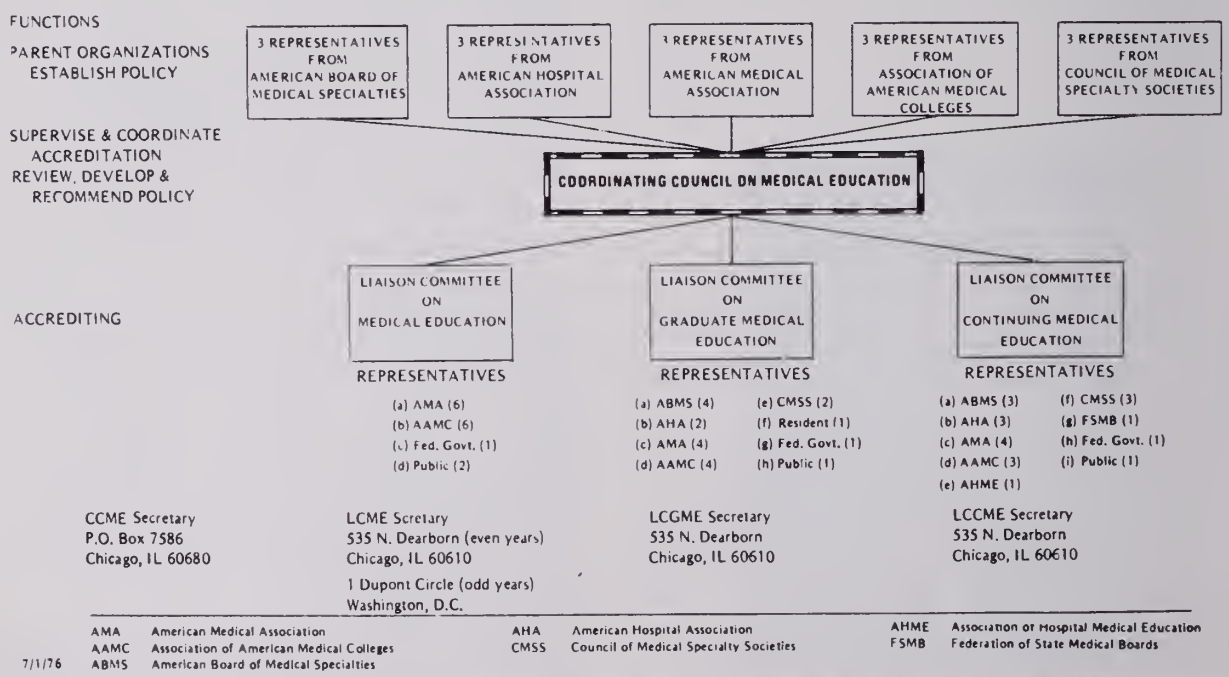


**Table 1. — Present organizational structure of undergraduate and graduate medical education. (From American Board of Medical Specialties, Annual Report, 1977-1978.)**

importance as recertification of physicians becomes national procedure.

It should be emphasized that the medical heirarchy detailed above, which includes in one way or other **every** U.S. physician, has been developed by the **private sector** of medicine and deserves the wholehearted support of each of us.

* * * * * *

Now let us review briefly a few of the problem areas in medicine. I have tried to focus on these issues as they affect our specialty.

### Manpower

*"It is difficult to look further ahead than you can see."*
*— Winston Churchill*

The issue of manpower (personpower?) is critical to the long-range planning for national health needs. There are a host of factors which bear on the training and distribution of physicians and all of them are complexly interrelated, so that a change in any one area will have an effect in another. A prime example is the government mandate (P.L. 94-484) to the medical schools that by July, 1979, 50% of the filled first-year residency positions must be directed toward primary care (a recent Institute of Medicine Report recommended that the figure be 60-70%), thus placing in peril the available manpower pool for the surgical specialties. Another example is Title VI of the same law, which virtually eliminates foreign medical graduates from post-graduate training in U.S. thoracic surgery programs. In addition, unpredictable events affect the system. The burgeoning of coronary bypass surgery in our own specialty is an example. We must emphasize to our legislative representatives how important it is to maintain a flexible attitude toward manpower. Any attempt to grind specific numbers (e.g., allotment of residency slots) into the formula may invite disaster.

Before medical specialty and geographic distribution inequities can be smoothed out and intelligent long-range predictions made, more information is needed about the present system. The work load and practice patterns of the thoracic surgeon are being closely monitored. The National Thoracic Surgery Manpower Study (the Brewer Report, issued in 1974) collected data for calendar 1970. In 1978 the Manpower Committee of the Society of Thoracic Surgeons provided updated statistics for the year 1976. Although the data are not strictly comparable because the Brewer Report included all surgeons (Boarded or not) doing thoracic surgery, while the STS report polled only Board certified surgeons, a comparison between the two years (1970 and 1976) is possible, and is pertinent because coronary artery surgery became a factor in the interval.

During 1970 there was an average of one "Thoracic Surgeon" (Board certified or committed to the specialty) per 100,000 population, and this surgeon performed approximately 60 major thoracic operations. During 1976 there was still an average of one Board certified thoracic surgeon per 100,000 population, and this surgeon performed on the average 87 major thoracic procedures. This represents an increase from 5 to 7¼ cases per month per surgeon. It should be stressed that these figures do not include endoscopy, minor chest cases, pacemaker implants or peripheral vascular cases. The average workload of the individual thoracic surgeon for 1976 can be further broken down as follows:[1]

| Operation | Cases/Year | Cases/ Surgeon/Year |
|---|---|---|
| Total cases/year | 195,850 | 87.4 |
| Non-cardiac thoracotomies | 86,734 | 38.7 |
| All cardiac operations | 109,116 | 48.7 |
| Coronary artery bypass | 71,551 | 31.9 |
| Congenital open | 11,449 | 5.1 |
| Congenital closed | 7,550 | 3.4 |

The numbers under cardiac operations suggest by subtraction that an average of 8 acquired cardiac procedures other than bypasses (e.g. valve) were done per surgeon/year. These data were derived from 2,240 Board certified thoracic surgeons responding to the poll. (Two articles on thoracic surgery manpower will appear soon in The Annals of Thoracic Surgery.)

Although figures representing mean values can be misleading, and while certainly these data do not present even a near-total picture of the thoracic surgeon's average workload, they do not suggest that the "avalanche" of coronary bypass surgery has saturated the manpower capability. At the same time, there seems to be no indication of impending over-population in the specialty, as has been suggested for general surgery (the SOSSUS report) and for neurosurgery. As a matter of fact, the complete data from the reports for the two time periods indicate a healthy equilibrium continues to exist as regards surgeon/consumer ratios, geographic distribution of services, and surgical workloads. Continued close monitoring of thoracic surgery manpower needs by people within and knowledgeable of the specialty is a responsibility of our thoracic organizations, and should continue to receive the highest priority.

### Continuing Medical Education (CME) and Recertification

*"There comes a time in every man's life when he must take the bull by the tail and look the situation square in the face." W. C. Fields.*

In the current atmosphere of consumer protection (Naderism), the public has decided it wants evidence that its doctors are staying abreast of medical progress. Good physicians have always known that medicine is a lifetime learning experience, and for them CME is already a well-ingrained pattern. Also, there is serious doubt that knowledge can be imparted to an unwilling recipient—a fact which questions the validity of enforced CME for all physicians. However, this is not the issue. The mechanism must be set up and made available, and a periodic reappraisal of the progress documented by recertification. Each medical discipline is now in the process of determining the most appropriate methods for its own constituents. For thoracic surgeons, the Coordinating Committee on Continuing Education in Thoracic Surgery (CCCETS), a group composed of representatives from the two societies, the Board, and the ACS, has agreed that CME and recertification should be both worthwhile and palatable— a pleasant learning experience. This article is not the place to detail CME requirements (they will be published in both thoracic surgical journals), but compliance will be easy for all thoracic surgeons. The recertification examination, administered by the ABTS, will likewise be simple to review for, and will take into consideration the candidate's current practice profile. The first voluntary recertification examination for lifetime certificate holders will be given in 1981. Certificates issued by the Board since 1976 remain in effect for only ten years, so that mandatory recertification to retain Board status begins in 1986.

In my view, it is counter-productive for physicians to resist recertification—as is being done in some specialties. If we take a positive attitude, our patients will view this favorably, and the process should result in the acquisition of new knowledge that will benefit these patients.

## Government

*When a gray-haired Zulu was asked to what he contributed his serenity, he replied, "I learnt early on to cooperate with the inevitable."*

There are a number of socioeconomic areas where the thoracic surgery interfaces with the government that presently are of concern—National Health Insurance, GMENAC, Federal device legislation, and the activities of the Federal Trade Commission to name a few. I will comment briefly on each of these, recognizing that what is gospel today is forgotten tomorrow, so rapidly does the picture change on Capitol Hill.

**National Health Insurance.** — It seems a fait accompli that some form of comprehensive health insurance will be the law of the land. The issue is whether President Carter, who favors a catastrophic type of coverage, or Senator Kennedy, who favors universal coverage, will prevail in Congress. Senator Kennedy, with Representative Waxman of California, plans to introduce this year's package (the Kennedy-Waxman Bill) to Congress soon. The program would be operated by four consortia of health insurance companies and health maintenance organizations under Federal supervision. It would be phased in over four years and would cost 28.5 billion when in full operation. The proposed bill already has the support of the United Auto Workers, the NAACP, the National Council of Senior Citizens, and others.

There is nothing we as physicians can do to influence this legislative battle, and in fact physician input has been conspicuously absent from all the deliberations thus far. Although we as physicians may see the financial and bureaucratic folly of NHI more clearly than other citizens, it is my personal belief that a National Health plan will change physician practice patterns less than did the advent of Medicare and Medicaid.

**Graduate Medical Education National Advisory Committee (GMENAC).**—Members of our specialty should be aware of GMENAC, for theoretically the recommendations of this body could have a great impact on medicine.

The committee was activated in 1976 by the Secretary of HEW with the following charge: "to analyze the distribution among specialties of physicians and medical students and to evaluate alternative approaches to insure appropriate balance. The Committee will also encourage bodies controlling the number, types, and geographic locations of graduate training positions to provide leadership in achieving the recommended balance." GMENAC, composed of outstanding representatives from both the private and public sectors, is hard at work (funded generously, of course, by the government) gathering data from which reliable conclusions can be drawn. No one impugns the honest motivation of this committee, but there is concern that their recommendations will be translated into Federal policy by DHEW using specific numbers and constraints, i.e. number of new physicians needed per year, thoracic surgery training quotas, physician distribution mandates, etc. As mentioned in the section on Manpower above, such specifics could vary from detrimental to disastrous, depending upon their impact.

**Federal Device Legislation.** — The Medical Device Act of 1976 (P.L. 94-295), is of special concern to thoracic surgeons. Controls were not applied at the time

of enactment, but future controls are to be implemented by the Food and Drug Administration. Over the past three years, the FDA has proposed numerous regulations, many of which have undergone one or more revisions. The Council and committees of both national thoracic surgical societies have worked diligently and unceasingly to make certain that these regulations are not unduly restrictive or capricious. These efforts have been met with success in some areas, failure in others. Particular thanks by our specialty is due to Dr. Arthur Beall of Houston, Texas, who has been our most effective spokesman at numerous Congressional hearings. Although the ultimate effect of this legislation is unknown, certain predictions can be made with reasonable certainty. Here I will quote my colleague, Dr. Richard Clark, an engineer as well as thoracic surgeon, and acknowledged expert in this area.

"The benefits of the Medical Device Act of 1976 are few and the liabilities to patients and the medical community are many. The Act will probably remove unsafe devices from the market place. There will be greater responsibility placed on the manufacturer of medical devices for repair, replacement or refund to the patient or hospital for defective devices. There will be fewer new devices in the future because of markedly increased costs for development and bureaucratic approval. Devices currently available and all future devices will be more expensive to patients, insurance carriers and government. The Act discourages clinical investigation because of the increased costs, time required, and risk imposed on the investigational surgical practitioner. The proposed regulations will put voluntary standards and certification organizations under federal control. Importantly, these regulations will not improve the scientific data base nor significantly decrease the risk of new devices. These regulations will put more lawyers to work at the expense of the clinician, his patients and the America public."[2]

**Federal Trade Commission.** — The FTC is clearly the "angry young man" in the federal government today. The stated purpose of this arm is to ferret out and punish (through the Justice Department) any individual, organization or group that conspires (knowingly or unknowingly) to suppress or inhibit free market competition. The FTC has pursued this goal with a zeal that even raises the eyebrows of other branches of government. Indeed, the FTC more than once has done head-to-head battle with other government agencies, including DHEW.

The Bureau of Competition within the FTC has looked for anticompetitive practices in all professions, but the favorite target for the past few years is the medical profession. I believe a short chronology of the actions taken by the FTC will convey the breadth and depth of their endeavors, and the extremes to which the agency is willing to go to justify its existence.

**September, 1975** — Files antitrust suit against American Society of Anesthesiologists alleging that it restricts fee competition.

**December, 1975** — Begins investigation to determine whether existing professional practices impede the development of HMO's as an alternative form of health delivery.

**February, 1976** — Begins investigation of Blue Shield plans to determine whether the BS-physician relationship in effect determines fee levels.

**July, 1976** — By consent order agreement two specialty societies (American Academy of Orthopedic Surgeons and the American College of Obstetrics and Gynecology) agree to stop using relative value scales as guides for pricing fees-for-service.

**November, 1976** — Files letter with U.S. Office of Education stating that the Liaison Committee on Medical Education (LCME) "should be denied" recognition as the voluntary agency to accredit medical schools because of an alleged conflict of interest established by the relationship between the Committee and the AMA.

**January, 1977** — Serves subpoenas on 30 medical societies seeking information on the supply of physicians and allocation of specialties.

**April, 1977** — Sends letters to 200 HMO's asking for information on anti-competitive restraints against them that have hindered their growth.

**March, 1978** — Accepts consent order requiring California Medical Association to stop publishing relative value studies and to withdraw those already published.

**November, 1978** — The AMA, plus one state and one local medical society, found in violation of FTC Act by restricting physician advertising. This judgment was handed down by a FTC administrative law judge, who stated that the AMA restrictions on physician advertising have served to restrict competitive pricing, causing "substantial injury to the public."

**February, 1979** — The American Society of Plastic and Reconstructive Surgeons has spent almost a half million dollars (raised by voluntary subscription from members) preparing legal defense to answer FTC demands that requirements for Society membership and policies regarding advertising be altered.

Well, you get the idea.

The next area the FTC will likely investigate is the specialty Board system. The following quotation is taken from a 1978 speech by Jonathan E. Gaines, when he was Director of the Bureau of Competition in the FTC:

> *"If you're involved in certification or accreditation activities, ask yourselves these questions: Do certification and accreditation standards establish only the minimum necessary to protect the public health and safety and to prevent fraud, or do they raise an excessive entry barrier? What objective evidence exists to support the need for each standard? Is the accreditation function insulated from the officers and governing body of the association? Is it insulated from the economic and political concerns of the members? Are competing interests given fair representation?"*[3]

Clearly, the FTC is a cause for major concern to the medical profession. To quote Drs. Avellone and Francis Moore in a recent article:[4]

> *"The FTC, a group of lawyers without any representation from physicians or consumers, has undertaken to examine certain aspects of the delivery of health services in the United States . . ."*
> *"In all these areas, the Commission appears to contravene efforts of the medical profession to abate quackery, to monitor medical education, to establish competence standards for practitioners and, by the relative value scale, to protect the public from irresponsible fee inflation. The outcome of this investigation could jeopardize the quality of medical care in the United States, without any perceptible effect on its cost."*

* * * *

> *"An optimist is one who thinks the future is uncertain" — Anonymous*

I have saved the FTC for the last topic of this article because it more clearly than the others conveys the magnitude of the problems facing us in the years ahead. I do not, however, wish to close on a dour note. I maintain considerable optimism regarding the future of organized medicine and individual medical practice **provided** the profession does certain things:

> We must recognize social change as a fact of life, and adapt medical practice accordingly. The medical profession (not the legal profession) must decide how best this is to be done.
>
> We must become familiar with the socioeconomic issues pertaining to medicine, and provide individual and collective input for their solution—which will be the proper ones if we do this.
>
> We must not let outside forces and pressures divide our ranks. Physicians by selection, training and choice are independent thinkers, a fact that makes our banding together more difficult than for other groups, but we must ally if we are to take the proper stand at the right time on critical issues.
>
> We must never lose sight of the fact that only a physician can provide proper medical care, and that, in the last analysis, a sick human being would not have it any other way. The physician-patient relationship is our honored heritage and our most precious commodity, and we must at all costs preserve it.

Someone recently said that doctors, like other people, are of three types: those that make things happen, those that watch things happen, and those that ask 'what happened?' Let's all get into the first category.

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**You never get a second change to make a good first impression.**

# Thoracic Surgery in Florida

Hawley H. Seiler, M.D.

The advent of thoracic surgery in Florida as a full-time specialty field began shortly after the termination of World War II. Prior to that time, a limited number of thoracic operations were occasionally performed by general surgeons. Three important events most probably resulted in the rapid expansion of this relatively new field of surgery. These were the establishment of a number of thoracic surgical residency programs throughout the United States, the increasing use of surgery in the treatment of pulmonary tuberculosis usually performed in the various tuberculosis sanatoria throughout the country, and the many lessons learned as a result of experiences in treating thoracic surgical casualties during World War II. At that time, there were no thoracic surgical residency programs in Florida. Many of the young men trained in the various centers throughout the country naturally migrated to our state with its tropical climate and with the need at that time for thoracic surgeons.

The first thoracic surgeon to enter practice in Florida and to limit his work in this field was Dr. Lawrence H. Kingsbury, of Orlando. Larry arrived in Orlando in 1946 to become chief surgeon of the now defunct Central Florida Tuberculosis Hospital. In addition, he established his private practice of thoracic surgery in the city of Orlando. Although much of the surgery performed at the Tuberculosis Hospital was in the form of collapse therapy, lobectomy and pneumonectomy were also done as indicated. Experience in pulmonary resection for tuberculosis naturally led to its application for other conditions such as benign and malignant tumors, lung abscess, bronchiectasis and so forth.

In 1948, Dr. DeWitt C. Daughtry moved from Richmond, Virginia to Miami, Florida and started his highly successful private practice of thoracic surgery. Dr. Daughtry soon became affiliated with the University of Miami School of Medicine and has had great influence in bringing many well qualified thoracic surgeons to Florida, and especially to the Miami area.

In 1949, the author (H.H.S.) moved to Orlando to join with Larry Kingsbury in the practice of thoracic surgery at the Central Florida Tuberculosis Hospital. During this period, refinements in technique brought about some limited lung resections in the form of segmental excisions of diseased portions of the lung whereas previously only lobectomy and pneumonectomy had been done.

There was at that time an extensive building program being undertaken by the State of Florida to construct three additional tuberculosis hospitals. Pulmonary tuberculosis was a major problem at that time and Central Florida Tuberculosis Hospital in Orlando, the only state supported tuberculosis sanatorium, was constantly crowded with a waiting list of many months. The three new modern tuberculosis hospitals were constructed in Tampa, Lantana, and Tallahassee. Prior to the construction of the Tallahassee facility, a small tuberculosis hospital was in existence in Marianna, Florida. The patients in this hospital were moved to the Tallahassee sanatorium when it was completed. Prior to that time, the author was more or less a "traveling thoracic surgeon" going several times a month to the Marianna Hospital to do minor thoracic surgical procedures, also going to the Tampa Hospital to participate in conferences and minor surgery, and subsequently going to the Tallahassee Hospital before the advent of a full-time thoracic surgeon in that institution.

In 1951, Dr. Ivan C. Schmidt was appointed chief surgeon at the Tuberculosis Hospital in Lantana and established his private practice of thoracic surgery in West Palm Beach. Prior to that time, in early 1950, the author had moved to Tampa to establish a private

practice of thoracic surgery, and was designated chief surgeon for the Southwest Florida Tuberculosis Hospital (subsequently the W. T. Edwards Tuberculosis Hospital) until its demise several years ago. Within a year or so, the Tallahassee Tuberculosis Hospital obtained the services of a thoracic surgeon when Dr. Nelson H. Kraeft established his practice there. In the meantime, Dr. Harold W. Johnston arrived in Orlando (1950) to become associated with Dr. Kingsbury. Dr. Daughtry's practice soon expanded to the point where other thoracic and cardiovascular surgeons were needed to assist him in the treatment of the large number of patients seen in the Miami area. His early associates included Drs. John G. Chesney, Harold C. Spear, Thomas O. Gentsch, and others over the subsequent years.

Dr. John E. Rayl was appointed Chief of Thoracic Surgery at the Lake City Veterans Administration Hospital in 1955, a position he has maintained to the present time. Thoracic surgery was initiated in the Jacksonville area in the period between 1953 and 1955 by Drs. J. Brooks Brown, James E. Cousar, and James M. Davis. It is believed that the first open heart surgery in Jacksonville was performed by Dr. Theodore L. Batchelder in 1959.

Dr. R. Carl Garby established his practice of thoracic surgery in St. Petersburg in 1952 and was soon followed by Drs. David S. Hubbell and Minas Joannides, Jr. Dr. Richard G. Connar began his private practice of thoracic and cardiovascular surgery in Tampa during the year 1955, and also during the same year, Dr. John R. Emlet settled in the Pensacola area.

The decade 1950-1960 was a period of tremendous growth and expansion in the field of thoracic surgery. It was a time when cardiovascular surgery was mostly limited to surgery of the great vessels such as repair of coarctation of the aorta, patent ductus arteriosus, the Blalock and Potts procedures, and similar operations. With the advent of the many young men recently trained in thoracic vascular, and cardiac procedures arriving in the State of Florida, there was accordingly a rapid increase in such vascular and cardiac operations.

In 1952, Dr. Robert Glover of Philadelphia, an associate of pioneer cardiac surgeon Dr. Charles P. Bailey, spent some weeks in Florida at Dade County Hospital in Miami and Tampa General Hospital in Tampa working with Drs. Daughtry and Seiler in performing the newly devised operation of closed mitral commissurotomy by the finger fracture method or by the use of cutting instruments inserted through the auricular appendage. Subsequently of course, refinements in the technique of many cardiac operations have occurred as the result of the invention of the extracorporeal pump permitting open heart surgery.

A significant advance in the field of thoracic and cardiovascular surgery occurred with the establishment of the thoracic surgical residency programs at the University of Miami School of Medicine (1957) and at the new University of Florida Medical School in Gainesville (1959). Dr. Robert S. Litwak (1957) was the first chief of thoracic and cardiovascular surgery in charge of the residency program at the University of Miami School of Medicine, and performed the first pump-oxygenator case on March 26, 1957 (Tetralogy of Fallot). He was subsequently followed by Drs. Thomas O. Gentsch and James R. Jude in this position. Dr. Myron W. (Bill) Wheat, Jr. arrived in Gainesville in 1958 and performed the first open heart surgery at the University of Florida in May 1959. The thoracic surgical residency program was established and chaired by him at that time.

One of the most significant contributions by the thoracic surgeons of this state was the founding of the prestigious Southern Thoracic Surgical Association (1954). Two of the three founding members of this organization (H.H.S. and D.C.D.) were from Florida and the third was Dr. James D. Murphy, of Oteen Veterans Administration Hospital in North Carolina, dean of thoracic surgeons in the South. Three of the first five meetings of this organization were held in Florida, and from a handful of 30 southern surgeons, this organization now comprises over 600 highly qualified and active surgeons, mostly younger men who have had their training during the past several decades. Approximately 100 thoracic and cardiovascular surgeons practicing in Florida are members of this organization.

Within the past decade there has come into being the Florida Society of Thoracic and Cardiovascular Surgeons now comprising 130 members. Formerly only the large cities attracted such surgeons, but today many of the smaller communities have their own thoracic and cardiovascular men in full-time or part-time private practice. Highly qualified thoracic and cardiovascular surgeons are now associated in the residency programs of the three medical schools within the state. Thus, from a small nucleus of pioneer surgeons who invaded the state some 30 years ago, there now exists an estimated 150 or more highly qualified practicing thoracic and cardiovascular surgeons.

Because of the limited space allotted to this short introduction to the history of thoracic surgery in Florida, it is not possible to individually cite the accomplishments of all the fine young thoracic and cardiovascular surgeons who now practice in our state. However, it would be inappropriate to conclude without acknowledging and paying tribute to the many highly trained and skillful surgeons who are rendering expert care to the people of Florida in the field of thoracic, vascular, and cardiac surgery.

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# Gastroesophageal Reflux and Hiatal Hernia: Complications and Therapy

Harold C. Urschel Jr., M.D. and Maruf A. Razzuk, M.D.

## Introduction

Gastroesophageal reflux results from incompetence at the cardioesophageal junction. Although it is associated most commonly with a sliding hernia of the stomach through the esophageal hiatus, it is not related to the size of the hernia and, indeed, may be present without a demonstrable herniation or be absent with some hernias. When incompetence of the normal valvular mechanism at the cardioesophageal junction occurs, digestive juices are regurgitated from the stomach into the esophagus, and, in many cases, may pathologically affect the respiratory tract as well. It has become increasingly evident that often the smaller the hernia, the more incompetent the cardia and the more severe the patient's symptoms of regurgitation.[2] Therefore, radiologic and anatomic demonstration of a hernia and categorization of its size becomes less important than the patient's symptoms of regurgitation and confirmation of reflux by functional radiography, esophagoscopy, acidity (pH), and motility or pressure studies of the esophagus.

Although complications involving the esophagus due to gastroesophageal reflux are generally appreciated, those referable to the respiratory tract are less well understood.[5,6]

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## Symptoms

Symptoms, when present, are due mostly to reflux. The symptom complex that results is largely related to the sensitivity of the esophagus to the irritating and erosive effects of a variety of digestive secretions found in the stomach. The classical distress referred to as heartburn is described as a burning substernal or epigastric discomfort occurring commonly after heavy meals or nocturnally when it will awaken the patient. Symptoms are aggravated by wearing tight abdominal clothes, sitting in a doubled up position, bending, or stooping. Assuming an upright position or elevating the upper trunk at bedtime and using anti-acids will help relieve the distress. Heartburn is often associated with excessive belching, especially after meals, or even regurgitation of small amounts of sour or bitter gastric contents into the mouth. An aching or squeezing type of substernal pain may occur that may be difficult to differentiate from the pain of duodenal ulcer, biliary disease, angina pectoris, or even acute myocardial infarction. This pain may extend upward into the jaw, neck, shoulders, arms, or even the back especially when there is an associated esophageal spasm. This discomforting pain may become worse after meals, during recumbency, stooping, or during physical exertion and may be relieved by assuming an upright position or hyper-extending the body.

Dysphagia is common and usually consists of sticking of solid food when first swallowed even when no stricture is present. This is presumably due to spasm at the esophagogastric junction or spastic contraction of the lower esophagus.

Bleeding may occur in the form of slow oozing or less commonly acute hemorrhage.

The signs and symptoms of aspiration secondary to gastroesophageal reflux are cough, bronchitis, asthma, wheezing, pneumonitis, fever, hemopytsis, intermittent dyspnea, hoarseness, choking, and chest wall pain.

The respiratory complications become more apparent when they are associated with esophageal signs or symptoms. The etiologic role of gastroesophageal reflux in the production of respiratory tract complications is more subtle and often more difficult to diagnose with certainty in the absence of esophageal symptoms. The onset of asthma in late childhood or adult life or severe broncho-pulmonary symtoms in a non-smoker without obvious allergies is highly suggestive of gastroesophageal reflux and aspiration. The presence of recurrent pneumonitis in the mid lung field, such as a middle lobe, lingula, or superior segments, is highly suggestive of aspiration from gastroesophageal reflux just as in patients with achalasia.

### Associated Conditions

Conditions that may co-exist with hiatal hernia and gastroesophageal reflux include cholelithiasis in about 25% of patients and peptic ulcers in 20%, usually of the duodenum. Diverticula of the colon occur frequently, and when they exist with gall stones and hiatal hernia the combination is referred to as Saint's Triad.

### Complications of Hiatal Hernia and Gastroesophageal Reflux

I Esophageal
- A. Esophagitis
- B. Bleeding
- C. Esophageal Stricture
- D. Shortening of the Esophagus
- E. Esophageal Perforation
- F. Columnar Epithelial Lined Lower Esophagus (Barrett Esophagus)
- G. Motility Disturbances of the Esophagus
- H. Contraction Rings of the Lower Esophagus
- I. Incarceration of Hiatal Hernia

II. Pulmonary
- A. Tracheo-Bronchitis
- B. Pneumonitis
- C. Asthma
- D. Bronchiectasis

### Diagnosis

Several beneficial diagnostic tests are employed in the diagnosis of hiatal hernia and gastroesophageal reflux in addition to the *careful clinical history.*

1. Roentgenographic: Diagnosis of hiatal hernia and gastroesophageal reflux are commonly made by barium swallow, upper G.I. series, fluoroscopy, and cine esophagogram. The cine esophagogram is a very helpful adjunct in assessing the magnitude (volume) and the extent (height) of the gastroesophageal reflux and subsequently deciding the method of therapy.
2. Endoscopic: Both rigid and flexible esophagoscopies are useful in evaluating the distal esophagus, finding out whether esophagitis is present, and, if so, classifying its extent.
3. Esophageal motility studies help assess the esophageal peristalsis and pressures, discover motility disorders if present, and evaluate the competence of the lower esophageal sphincter.
4. The pH reflux examination is a sensitive and useful clinical test of cardial incompetence, and it is highly specific for reflux with only 5-10% false correlation. Twenty-four hour pH tests correlate well with etiology of symptoms if pathology is in the esophagus.
5. The acid infusion test determines whether the patient's esophagus is the source of his symptoms. If the symptoms are reproduced by the infusion of 1/10th normal hydrochloric acid, not by saline, the test is then positive.
6. The acid clearing test determines the rapidity with which the esophageal peristalsis can raise pH to 5 after the instillation of 1/10th normal hydrochloric acid. Delayed clearing may also be associated with pre-existing esophagitis.

The diagnosis of respiratory symptoms secondary to gastroesophageal reflux and aspiration is difficult, and is usually established as a diagnosis by exclusion. Definite reflux into the esophagus must be demonstrated and then the person's aspiration symptoms carefully correlated with the clinical picture, for example the presence of bronchitis in the non-smoker or a trial period off all irritants such as cigarettes with a continuation of symptoms that were present prior to the initiation of the therapy.

### Differential Diagnosis

1. Angina Pectoris
2. Thoracic Outlet Syndrome
3. Biliary Tract Disease
4. Gastric or Duodenal Pathology
5. Pulmonary Lesion
6. Scleroderma

## Medical Management

The proper management of patients with hiatal hernia and gastroesophageal reflux depends on the severity of the symptoms and presence or absence of associated complications. Medical treatment is aimed largely at reducing esophageal reflux and minimizing esophageal damage through weight reduction, elimination of aggravating factors, elevation of the head of the bed, bland diet, and anti-acids.

Most patients that have minimal esophageal symptoms can be treated satisfactorily by a medical regimen. On the other hand, when marked symptoms of gastroesophageal reflux or pulmonary aspiration are present, less benefit is likely to accrue from such a program. When complications such as stricture, ulceration, Barrett's Esophagus, or bleeding are present, medical therapy should be given until any severe inflammatory process is controlled before surgical treatment is instituted.

## Indications for Surgery

I. Persistent Symptoms of Gastroesophageal Reflux on Excellent Medical Program

II. Significant Complications
- A. Stricture
- B. Ulceration
- C. Perforation
- D. Bleeding
- E. Incarcerated or Strangulated Hiatal Hernia
- F. Recurrent Pulmonary Aspiration

## Surgical Therapy

Esophagoscopy and bronchoscopy are usually performed at the time of operation. The technical procedure of choice over a period of years has been the Collis gastroplasty[1] combined with a Belsey Mark IV fundoplication.[4,7,8] This technique allows the esophagus to be lengthened functionally to prevent gastroesophageal reflux. This provides an intra-abdominal segment of esophagus exposed to positive pressure, an adequate fundoplication under no tension (the previous disadvantage of the Belsey procedure alone in many patients),[3] and no dysphagia which can occur in the 360° Nisson fundoplication if not performed properly.

Esophageal strictures are dilatated either from above or through a gastrotomy just below the cardia. Then a subsequent Collis-Belsey procedure is employed. Occasionally a stricture will be long and not amendable to dilatation. In this case, resection with short colon interposition is appropriate. The colon extends into the abdomen for the appropriate length exposed to positive pressure producing an anti-reflux valve-like mechanism.

Postoperative management includes gradual increase in diet to that of a normal patient with gradual increase in activity. Three months should be allowed before heavy lifting or straining occurs to insure adequate healing. Postoperative studies including cine esophagography; manometery and pH studies have confirmed the efficacy of this procedure over a ten year period with an amazingly low incidence of recurrence-less than 1%. If the appropriate attention to technical details is oberved, the results are superb. All other system diseases including duodenal ulcer should be ruled out or assessed prior to any institution of therapy to provide adequate relief of symptoms postoperatively.

## Complications of Surgery

1. Failure to rule out significant pathology in other areas such as the lung, thoracic outlet, heart, duodenum, and biliary tree may result in incomplete relief of symptoms.
2. Technical failures may occur such as:
   - a. Using too large a Malone Boujie which provides an incompetent cardia postoperatively.
   - b. Using too small a Boujie or angling it with the stappler so that there is stenosis at the inferior end of the gastric esophagus.
   - c. Tying the crural sutures too tight produces dysphagia and the "gas bloat" syndrome.
   - d Bleeding or abscess formation secondary to leak at the suture line although theoretically possible have not been observed in over 1000 procedures.

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# Pulmonary Evaluation of the Thoracotomy Patient

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In the last 20 years since the introduction of isoniazid, most lung resection has been directed toward the diagnosis and cure of bronchogenic carcinoma. The approach to the patient with a suspected or diagnosed lung cancer necessitates answers to two basic questions: 1) Will resection produce a cure? 2) Can the patient tolerate a pneumonectomy? The first question will comprise the search for "resectability," the second the search for "operability."

## Resectability

The search for resectability involves investigation into whether the tumor has spread to intrathoracic structures which cannot be resected or extrathoracically. Much of this investigation involves the basic techniques involved in the work-up of any medical problem.

1. History — Has the patient experienced symptoms of central nervous system spread, bone pain, new skin lesions or hoarseness?
2. Physical examination — Is there lymphadenopathy, hepatosplenomegaly, a skin mass, lateralizing signs, jugular venous distention or Horner's Syndrome?
3. Routine laboratory studies — Does the patient demonstrate anemia, coagulation problems, hyponatremia, or abnormal liver function studies?
4. Routine chest x-ray — Is there evidence of pleural effusion, elevated hemidiaphragm, paratracheal adenopathy, or rib erosion?

Much enthusiasm has been voiced for using radionuclide scanning in detecting occult metastases to the most frequently involved extrathoracic structures, the brain, liver and bone. This enthusiasm has waned somewhat in light of recent studies suggesting that routine brain, liver and bone scans are not likely to reveal true metastatic disease in the absence of symptoms.[1] Gallium-67 scanning to detect mediastinal spread has been evaluated by the same group of investigators and found to be helpful when the primary lung lesion concentrated the isotope.[2]

Mediastinoscopy has been routinely used in the prethoracotomy assessment of intrathoracic unresectability, and has been found to have low morbidity in a series of 6000 procedures.[3] More recent studies have suggested that some selection of the patient in need of this procedure is possible using the location of the primary lesion on chest x-ray and the histologic cell type.[4, 5]

## Operability

If the answer to the question of resectability is a qualified yes, the next step is the evaluation as to whether the patient's cardiopulmonary function is sufficient to permit pneumonectomy. In lung cancer this question is necessary because 70 to 96 percent of patients presenting with carcinoma of the lung have signs and symptoms of coexistent chronic obstructive airways disease, with approximately 20 percent having severe pulmonary function impairment as well.[6] This finding is not surprising considering the etiological link to cigarette smoking in both diseases.

Tolerance to pneumonectomy is chosen as the goal of this evaluation for a purely practical reason. If the patient can physiologically tolerate pneumonectomy, the surgeon has this option available to him at the time of thoracotomy. It is not uncommon for a planned lobectomy to become a necessitated pneumonectomy due to unsuspected extention of the tumor. In the practical approach to the question of operability, three laboratory techniques appear to be most useful: routine ventilatory studies, exercise studies, and tests of split lung function.

## Routine Ventilatory Studies

Pulmonary function studies which test the function of both lungs simultaneously at rest have been used extensively in an attempt to predict postoperative respiratory insufficiency. In 1955 Gaensler et al reported on preoperative studies in 460 patients undergoing

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resection or thoracoplasty for tuberculosis.[7] These investigators found a 40 percent postoperative mortality rate in patients with a maximum breathing capacity (MBC, now called maximum voluntary ventilation MVV) of less than 50 percent predicted normal and a vital capacity (VC) of less than 70 percent of predicted normal.

In a retrospective study of 142 patients with bronchogenic carcinoma who had pulmonary function studies and surgery, Boushy et al[8] reported a relationship between the degree of airway obstruction and the physiologic impact of resection. These investigators suggested that a forced expiratory volume in 1 second ($FEV_1$) of less than 2 liters in an individual more than 60 years old was associated with postoperative respiratory insufficiency in 40 percent of patients.

Mittman[9] reviewed 199 pulmonary resections which resulted in death due to cardiorespiratory failure. This study revealed that an elevated residual volume to total lung capacity (RV/TLC) ratio over 50 percent was a harbinger of potential inoperability. Other significant complicating factors included: arrythmias or EKG evidence of an old infarction; reduced MBC; cardiomegaly or congestive heart failure and; abnormal nitrogen washout and oximetry.

In summary, routine ventilatory studies can provide screening information as to which patient **may** not tolerate pneumonectomy and, therefore, need more extensive cardiopulmonary evaluation. These useful parameters are listed in Table 1.

Table 1. — Routine Ventilatory Findings Suggesting Increased Risk for Pneumonectomy

1. Maximum Voluntary Ventilation (MVV)
   — Less Than 50% of Predicted Normal
2. Forced Expiratory Volume in 1 Second ($FEV_1$)
   — Less Than 50% of the Forced Vital Capacity (FVC) or Less Than 2 Liters.
3. Residual Volume to Total Lung Capacity (RV/TLC)
   — Greater Than 50%

## Exercise Studies

In the past it was common for a surgeon to assess subjectively a patient's operability by walking with him down a corridor or up several flights of stairs. These observations have been confirmed more objectively in several studies.

From a study of 213 patients who underwent pneumonectomy for carcinoma of the lung, Van Nostrand et al[10] found a 50 percent operative mortality in patients unable to walk on level ground without dyspnea; on the other hand, in patients able to climb two flights of stairs with minimal dyspnea operative mortality was 11 percent. Reichel[11] reviewed the results of a standardized treadmill-walking test to evaluate 75 patients undergoing pneumonectomy. None of the patients who completed all six stages of the test suffered cardiorespiratory complications whereas, 57 percent of patients unable to complete the study experienced postoperative problems.

## Tests of Split Lung Function

There are significant theoretical and practical advantages in measuring the function of the lung to be resected as compared with the function of the opposite lung. Of historical interest is bronchospirometry, a procedure which involved tracheal intubation of the patient with a double-lumen catheter connected to a double-bell spirometer. Each bell was filled with oxygen. The VC of each lung represented its ventilatory ability, and its oxygen uptake represented its degree of perfusion. Using this technique, Neuhaus and Cherniack[12] were able to predict accurately postpneumonectomy VC and MBC in 80 patients.

In 1951, Carlens[13] et al developed a balloon-tipped cardiac catherization technique by which the pulmonary artery of the lung to be resected could be temporarily occluded thus producing a "physiologic pneumonectomy." Using this technique, Uggla[14] found that pulmonary hypertension and systemic arterial hypoxemia on exercise are usually associated with postoperative death due to cardiorespiratory failure. Our experience parallels that of Uggla; however, because of the complexity of the study, this technique is usually reserved for patients in whom the decision concerning operability is extraordinarily difficult.[15] A summary of those findings suggesting inoperability is listed in Table 2.

Bergen[16] in 1960 reported on the lateral position test which uses a simple oxygen-filled spirometer as a method of measuring unilateral lung function. The patient lies supine and breathes from the spirometer, and a baseline of tidal ventilation is established. By measuring the deviation from the baseline when the patient is moved to the right and left lateral decubitus position, the relative function of each lung can be estimated. Recent reports using this technique have shown good correlation with radionuclide methods, but a prospective study has not been reported.[17, 18]

Radionuclide imaging has added a significant

Table 2. — Split Function Criteria of Physiologic Inoperability

1. Mean Pulmonary Artery Pressure with Balloon Occlusion and Exercise = $>$34mmHg
2. Arterial Oxygen Tension ($PaO^2$) with Balloon Occlusion and Exercise = $<$ 46mmHg
3. Predicted Postpneumonectomy $FEV_1$ Using a Quantitative Lung Scan = $<$800cc

dimension to studies of lung function. By means of either multiple scintillation counter probes or a gamma camera, one can obtain quantitative data on the intrathoracic distribution of function as well as changes in function with respiration. Using Xenon[133] ($^{133}Xe$) a poorly soluble gas with a short half-life, Kristersson et al[19, 20] were able to predict the postpneumonectomy and postlobectomy $FEV_1$ and FVC in lung cancer patients.

Perfusion lung scans are almost universally available in hospitals for screening patients for pulmonary thromboembolism. With isotopes [macroaggregated albumin labeled with Iodine[131] ($^{131}I$), ferric hydroxide macroaggregates or microspheres labeled with technetium 99m ($^{99m}Tc$)] and a gamma camera with a split crystal, one can obtain estimates of unilateral perfusion which correlate with unilateral ventilation as measured by other techniques.[21, 22]

Using the posterior-anterior lung scan obtained with the crystal split in the mediastinum, one can quantify the number of counts coming from each lung separately. By adding these counts together then dividing to produce a percentage, an estimate of the contribution of each lung to total function is possible. Using the $FEV_1$ obtained during the routine ventilatory studies and the following formula, a prediction of postpneumonectomy $FEV_1$ is also possible.[23, 24]

| Predicted Postpneumonectomy $FEV_1$ | = | Preoperative $FEV_1$ X Percentage of counts coming from the lung destined to remain |
|---|---|---|

A predicted postpneumonectomy $FEV_1$ of 800cc or greater signifies operability. When in error, the value obtained generally underestimates postoperative function thus providing an additional safety factor.

## Preoperative Management

After the assessment of operability as outlined in Tables 1 or 2, the patient is approved for surgery. A useful technique of perioperative monitoring has been measurement of VC at the bedside using a hand-held Wright or Bournes Respirometer. A maximum inspiratory pressure called inspiratory force (IF) can also be assessed at the bedside using an aneroid manometer with a mouthpiece. If these measurements reveal a VC of less than 10-15cc/kg body weight or an IF more positive than -25$MH_2O$, the patient should be electively intubated (preferentially nasally) with a large (8mm inside diameter) soft cuff endotracheal tube at the time of induction of anesthesia. In the recovery room postoperatively, these same tests plus arterial blood gas values can be measured. If postoperative values are worse than those obtained preoperatively, the tube may be left in place and the patient placed on mechanical ventilation until appropriate criteria for weaning are met.[25]

In summary the evaluation of cardiopulmonary function preoperatively will help to apply the potential benefits of surgery to those patients with a lung mass suspected of being malignant.

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# Direct Diagnosis of the Pulmonary Nodule

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Finding single or multiple nodules in the chest x-ray of an often asymptomatic patient is a common clinical problem. Reliable radiographic criteria to distinguish between benign and malignant disease are not available even when supplemented by CAT Scan. Precise diagnosis requires the histologic, cytologic or bacteriologic assay of tissue, so that rational treatment can be planned.

Percutaneous needle biopsy for diagnosis of lung lesions has been advocated for many years.[1] Wide acceptance of the method was limited by reports of associated mortalities[2] and implantation of carcinoma in the needle tract.[3] Enthusiasm for this approach has been resurrected over the past decade by reports on a safe technique of aspiration biopsy. Use of a finer biopsy needle, improved cytopathologic techniques and TV monitored fluroscopy, have resulted in a high diagnostic yield with minimal complications. Encouraged by the results in other centers[4] and responding to the inherent challenge to the nonuniversity physician in the report of 1,211 cases by Sagel et.al[5], we started a study of our patients.

## Clinical Material

Between September 1976 and 1978, 57 patients were seen with either single or multiple pulmonary nodules. There was no consistent pattern in the discovery of the lesions. Office annual physical examination with chest x-ray, preoperative chest x-ray for non-thoracic surgery, emergency room x-ray following injury and x-ray obtained during general medical admission, represented the most familiar source of referral. If a previous remote chest x-ray could be located and showed the same finding, usually no further study was performed. Such instances were rare if the x-ray was done more than four years prior to the most recent film.

Forty-five patients (75%) were asymptomatic upon discovery of the pulmonary nodule. Of the remainder, five had a clinical presentation of Pancoast Syndrome and in the other seven, there was evidence to suggest metastatic disease (i.e., acute neurologic deficit, pathologic fracture, hypercalcemia, etc.). In this latter group, the pulmonary nodule was often an incidental finding but, became indicated as the primary disease process during progressive revelation of the patient's true clinical state.

Patients were chosen for percutaneous transthoracic needle biopsy when sputum assay and bronchoscopy failed to yield diagnostic material. The lesions were located centrally, peripherally and in midlung field and varied in size from 1-10 centimeters.

## Biopsy Procedure

The nodule selected for biopsy is accurately localized using the plain film, supplemented with tomography. The patient receives Atropine and some sedation as indicated.

An x-ray suite with television monitored fluroscopy is used. The patient is positioned so as to provide convenient direct needle access to the nodule. Using fluroscopy as a guide, an area of chest wall skin subadjacent to the nodule is marked, cleansed and anesthetized by infiltration. Through a scalpel blade stab wound in the cuticle, an 18T gauge needle (3½" or 6" long) is advanced across the pleural space into the lesion while the patient temporarily suspends breathing. A reliable indication of transfixation is movement of the lesion as the needle is manipulated. The needle stylet is removed and a 20 cc glass syringe attached. The needle is advanced and twisted in and out of the lesion while maintaining suction on the syringe. The needle and syringe are removed as a unit and the aspirated material ejected in aliquots into 90% alcohol, saline and 10% formalin. If inadequate tissue is obtained, the procedure is repeated, although the likelihood of complication is increased.

An upright chest x-ray is performed immediately and six hours following the biopsy in search of possible pneumothorax.

## Results

A single biopsy was judged sufficient in 55 patients. In two instances where the initial biopsy was non-diagnostic and the suspicion of lung cancer was high, the biopsy was repeated with success in both cases.

From the Tallahassee Memorial Regional Medical Center, Tallahassee.

Predictably, the most frequent finding was primary lung cancer. Table 1 shows the distribution of diagnosis among the 57 patients. Two patients with laryngeal carcinoma were found to have concomitant lung cancer of a different histologic type. One patient was found to have a squamous carcinoma in the left lung and an adenocarcinoma in the right lung, although the latter may have been metastatic from a remote (25 years) rectal carcinoma. Scheduled surgical resection of a well localized lesion in the right lower lobe of a 45-year-old man was cancelled when multiple 1 centimeter nodules in the left lung were noted on the immediate preoperative x-ray. One of these nodules was biopsed with the needle technique and was found to contain malignant cells of the same type as the right lung lesion.

**Table 1**

**Pathologic Diagnosis from Biopsy**

| | | No. of Patients | |
|---|---|---|---|
| Squamous carcinoma | | 15 | |
| Adenocarcinoma | | 11 | |
| Unspecified carcinoma | | 11 | |
| Oat cell carcinoma | | 4 | |
| Undifferentiated carcinoma | | 3 | |
| Granuloma/inflammation | | 5 | |
| Hamartoma | | 1 | |
| | Total | 50 | (88%) |
| Failed | | 7 | (12%) |

Of the 31 patients subjected to thoracotomy, 22 had a preoperative diagnosis of carcinoma. Twenty-one had lobar or whole lung resection for attempted cure and one was judged unresectable. There were no false positive biopsies in this group. The other thoracotomies were in seven patients with no diagnosis and two patients in whom the suspicion of carcinoma was high despite the finding of inflammatory tissue from the biopsy. Granulomata were removed from the latter two patients.

The diagnosis of lung cancer was possible in 16 patients who were judged too ill to tolerate a diagnostic thoracotomy. The information obtained by needle biopsy served to help the medical attendants plan reasonable palliative or humane terminal care in appropriate cases.

## Complications

These are summarized in Table 2. Forty-one patients (72%) had no complications from the needle biopsy. The volume of hemoptysis, when it occurred, never exceeded 50 ml. Pneumothorax was more likely if numerous biopsies were attempted at the same setting. A chest tube was inserted when a pneumothorax was associated with respiratory distress or exceeded 25%

The one death occurred in a debilitated elderly man whose blood work suggested either osseous or hepatic metastatic disease. He had a cardiopulmonary arrest eight hours following a biopsy uncomplicated by pneumothorax. Autopsy was denied.

None of the patients followed for more than two years have developed carcinoma in the tract of the needle biopsy.

**Table 2**

**Morbidity and Mortality**

| | No. of Patients | |
|---|---|---|
| Hemoptysis | 3 | (5.2%) |
| Pneumothorax | 12 | (21%) |
| Chest Tube | 4 | (7.0%) |
| Death | 1 | (0.17%) |

## Summary

Percutaneous transthoracic needle biopsy for diagnosis of pulmonary nodules has been successful and relatively safe in our hands. Patient and fellow physician acceptance of the concept has encouraged us to continue this approach. In the realm of cost effectiveness, we believe that in many instances the diagnosis obtained from the needle biopsy has precluded the need for further investigation and has provided definite direction in the treatment of the primary disease process.

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# Thoracic Endoscopy in Children

**Bradley M. Rodgers, M.D., James L. Talbert, M.D. and Farhat Moazam, M.D.**

Technologic and anesthetic advances within the last decade have significantly enhanced the endoscopic capability of thoracic surgeons, particularly those dealing with pediatric patients. Limited for years by the necessity of applying instruments designed for adult endoscopy to children, the thoracic surgeon today has available an array of miniaturized instruments, specifically designed for the requirements of endoscopy in these small patients. Concomitant improvements in anesthetic techniques for children have encouraged increasing clinical use of these procedures. The purpose of the current review is to present the "state-of-the-art" of the three endoscopic procedures most commonly performed by the pediatric thoracic surgeon.

## I. Laryngoscopy and Bronchoscopy:

Endoscopic evaluation of the airway in small children is most commonly indicated for congenital anomalies or obstructions, acquired obstruction, and foreign-body aspiration. Many anomalies such as subglottic stenosis and subglottic webs are not only diagnosed but also treated by endoscopic techniques. More complicated anomalies, such as laryngo-esophageal clefts, require more specialized endoscopic techniques for diagnosis. Indications for airway evaluation in older children include diagnosis of persistent pulmonary infiltrates or abscesses and the evaluation of bronchiectasis. Miniaturization of anterior commissure scopes and suspension laryngoscopes has allowed the use of these instruments in small infants and has greatly facilitated the diagnosis and endoscopic treatment of many airway lesions in these patients. The most significant development in pediatric endoscopy in the past decade has been the construction of the Hopkins rod-lens optical system. The use of glass rods and lenses for the transmission of light in this system allows for far more efficient passage of light through the telescope and has facilitated the miniaturization required for pediatric usage.[1] The quality of resolution and wide viewing angle of this equipment has introduced a new era in rigid endoscopy. These optical systems, in general, have allowed for more accurate diagnosis and precision of endobronchial procedures in children. The flexible, fiberoptic bronchoscope, which has been employed so successfully in adult patients, is less applicable to pediatric-aged patients because of the small caliber of the infant airway. Insertion of the flexible bronchoscope into the airway of these small children makes assisted ventilation very difficult.

Increasing facility with all of these instruments has allowed pediatric surgeons to pioneer many advances in endoscopic therapy, such as endobronchial electroresection[2] and cryotherapy[3] for congenital and acquired strictures and laser fulguration[4] for laryngeal papillomata.

Careful evaluation of the airway in a small child is a demanding procedure and requires a motionless subject so as to minimize operative trauma to the delicate laryngeal and subglottic tissues in these patients. For this reason, general anesthesia is preferred. The procedure is initiated with inhalation anesthetic agents administered by face mask so as to allow evaluation of the position and movement of the vocal cords and estimation of the caliber of the subglottic airway with the anterior commissure scope. This aspect of endoscopic evaluation is essential, even for patients suspected of having more distal airway difficulties. Particular attention is paid to the posterior laryngeal wall during this evaluation to detect the presence of laryngo-esophageal clefts, an often-overlooked cause for respiratory difficulty in children. After evaluating the upper airway with the commissure scope, the patient is paralyzed with short-acting muscle relaxants and the appropriate bronchoscope inserted. Ventilation of the patient may be accomplished through the side-arm of the bronchoscope even with the telescope inserted. For foreign body extraction, the forceps may be passed through a separate operating channel in the bronchoscope and the foreign body grasped under direct telescopic vision. A small polyethylene catheter may also be passed through this channel for

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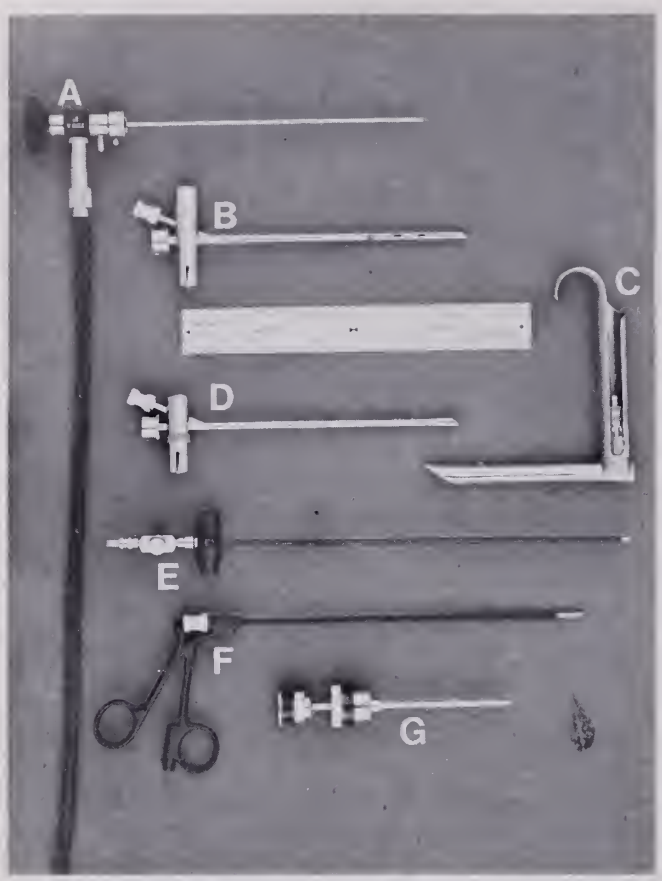


Fig. 1 — Pediatric thoracic endoscopy instruments. A) Hopkin's rod-lens straight forward telescope (O.D. 2.7 mm) with connecting light cable. B) 20 cm x 2.5 mm rigid ventilating bronchoscope. C) Pediatric anterior commissure laryngoscope. D) 20 cm x 3 mm rigid pediatric esophagoscope, E) Insulated suction cannula for thoracoscopy. F) Insulated biopsy forceps for thoracoscopy. G) Pediatric thoracoscopy trocar (O.D. 3.75 mm).

selective irrigation or aspiration of various areas within the tracheobronchial tree. Postoperative chest roentgenograms should be obtained in every patient to evaluate the presence of atelectasis or pneumothorax. Infants weighing less than 10 kg body weight receive inhalation treatments with racemic epinephrine for four hours postoperatively to minimize laryngeal edema.

## II. Esophagoscopy:

The indications for esophagoscopy in children are generally similar to those for adults, with some change in emphasis. The most common indications in pediatric practice include diagnosis and treatment of esophageal strictures, removal of esophageal foreign bodies, and evaluation of gastroesophageal reflux. Endoscopy for the diagnosis of upper gastrointestinal bleeding is less frequently performed than in the adult, but remains an important diagnostic tool in pediatric practice.

As with bronchoscopy, the introduction of the Hopkins rod-lens system has allowed for considerable miniaturization of pediatric esophagoscopes, while preserving excellent visability. The capacity to introduce foreign body forceps under direct telescopic visualization has greatly enhanced the precision of extraction of these objects. The rigid esophagoscopes are preferred for evaluation of strictures in these small patients and for removal of foreign bodies. In evaluating gastroesophageal reflux, flexible fiberoptic esophagoscopes are now manufactured which are quite suitable for use in small infants and children. These instruments, with 2 or 4-way tip deflection, have considerably expanded our ability to visualize the distal esophagus, stomach and duodenum in small children. They have proven invaluable in the evaluation of upper gastrointestinal hemorrhage and are useful in removing persistent gastric foreign bodies.

Esophagoscopy in small children is a demanding endoscopic procedure and requires considerable delicacy and precision for its safe performance. These patients are anesthetized with general anesthesia, employing an endotracheal tube for airway control. The flexible trachea of the small child is easily compressed by either the rigid or flexible esophagoscope, and respiratory obstruction may be caused without such airway control. The use of muscle relaxants is generally not required in these patients. In the older adolescent patient, the flexible gastroscope may be passed using intravenous sedation and topical anesthesia of the hypopharynx. Nonetheless, we continue to prefer general endotracheal anesthesia when using the rigid esophagoscope in these older children, primarily for the comfort of the patient.

## III. Thoracoscopy:

Although employed for several decades in this country and in Europe, thoracoscopy has only recently been successfully applied to children. Increasing use of this procedure has shown it to be most useful in obtaining a lung biopsy for diagnosis of pulmonary infiltrates in immuno-suppressed patients. Biopsy of unexplained pulmonary infiltrates in normal hosts is also easily achieved and specimens submitted for histologic evaluation as well as culture. Finally, this procedure is being used increasingly for the tissue diagnosis of mediastinal and thoracic tumors. Thoracoscopy has the advantage of producing significantly less morbidity than a diagnostic thoracotomy, while allowing observation of all of the structures within one hemithorax.

Initially practiced with a cystoscope, thoracoscopy today is performed with miniaturized equipment specifically designed for pediatric laparoscopy. The Hopkins

rod-lens telescope provides the basis for visualization and is passed through a small laparoscopy trocar. Operating instruments, insulated to allow electrocoagulation, are passed through a separate trocar. The entire procedure is performed on a premedicated patient with the addition of a small amount of intravenous anesthetic (Ketamine) and local anesthesia in the region of insertion of the trocars. In older children, the addition of a Stellate ganglion block and intercostal regional blocks greatly reduce the requirement for intravenous agents. The first trocar is inserted through the chest wall over the top of an adjacent rib and a pneumothorax is established. The telescope is passed through this trocar and a careful view of the contents of the hemithorax is achieved. For biopsy or selective aspiration, a second trocar is inserted, through which the operating instruments may be passed. Lung biopsies are obtained by grasping the pulmonary parenchyma with the biopsy forceps under direct vision and sheering off a piece of lung tissue by retracting the forceps through the intercostal trocar. If necessary, subsequent to obtaining the biopsy, the surface of the lung can be electrocoagulated with the biopsy forceps. After obtaining pulmonary or mediastinal biopsies, the trocars are removed and a single intercostal chest catheter is left in place for approximately 24 hours.

Modern pediatric endoscopy is very directly the result of significant technological advances. The rod-lens telescope system has allowed for miniaturization of the endoscopic equipment and newer instruments have been specifically designed for use in children. The techniques of laryngo-bronchoscopy, esophagoscopy and thoracoscopy are safe to perform and provide valuable information for the clinician treating children with pulmonary disorders.

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# Carcinoma of the Lung in the 1970s

James E. Cousar III, M.D.

The death toll from carcinoma of the lung continues to rise. Consider these figures. In 1949, there were 20,000 deaths from lung carcinoma, in 1971, 69,000, in 1976, 86,000. Some predictions are that by the year 2000, there will be 295,000 deaths from lung carcinoma if the trend continues to accelerate at this rate. In men over 35, lung carcinoma leads all other malignancies as a cause of death. In women over 35, it is the second or third most common fatal malignancy, the variation being by decades. The disease is on the increase in women; the 1976 figures showed about 23 percent of all lung cancers occurred in women.

The relation of cigarette smoking to the more common varieties of lung cancer (epidermoid and small cell) seems well established. The tragedy is that the American public which clamors for "a cure for cancer" has not embraced this available prophylactic measure, the cessation of smoking. The fact that children are beginning to smoke at an earlier age than previously makes the future outlook rather bleak.

A few hopeful signs appear from time to time. The narrow defeat in California of the ordinance against smoking in public, the aggressive attitude of "H.E.W." in opposing smoking, and the segregation of smokers and nonsmokers in certain places give rise to the faint hope that the ash tray may some day go the way of the cuspidor.

Tobacco products, their production and marketing, remain an important economic fact of life in the United States. Lung cancer also has a serious negative economic impact in that the cost of medical care for this cancer has been estimated at about two billion dollars per year.

The five year survival rate of lung cancer has not been much more encouraging than the statistics on smoking. The overall survival rate from lung cancer has been variously estimated at six to nine percent of all diagnosed cases. It has been estimated that only about 25 percent of lung cancer cases can be satisfactorily resected with the hope of a five year survival.

Unfortunately, screening patients for early detection has not significantly improved results of treatment as expected. In our present radiation conscious society, it is unlikely that mass screening by chest films will be offered or accepted; however, the screening of high risk patients by sputum cytology and x-ray may be of value.

The cell types of lung carcinoma and percentage of occurrence in various series are:

1. Epidermoid-36 to 49 percent.
2. Small cell-17 to 29 percent.
3. Adeno-16 to 23 percent.
4. Large cell-nine to 16 percent.

With the exception of the small cell (Oat cell) carcinoma, the best five year survival rates have been achieved by surgical resection. Mountain has set up a method of classification in staging lung carcinoma. This staging is based on tumor size, location and the presence or absence of distant metastases. In Class I, the most favorable classification, five year survival rates of up to 50 percent have been reported.

The anatomical limits of surgical excision were probably reached some years ago. There have been refinements and improvements in technique such as the use of the stapler, metal clips for hemostasis, and wide use of the cautery; however, none of these has changed the basic operative procedures worked out earlier.

The real improvement in the surgical treatment of cancer of the lung has been in better selection of operative cases. The result has been that relatively fewer patients are subjected to a full scale thoracotomy, but in those patients undergoing thoracotomy the opportunity for resectability and cure has been better. The generally available tests and procedures that have produced this change are: improved pulmonary function evaluation, radioactive and CAT scans, mediastinoscopy and limited thoracotomy, fiberoptic bronchoscopy, and percutaneous lung biopsy. The ready availability in many communities of a good pulmonary function laboratory and the qualified persons to perform and evaluate the tests has helped greatly in selection of patients for pulmonary resection. This can work both ways, by screening out the patient with poor function and by alerting the surgeon to the possibility of operation in medium risk patients with proper preparation.

For many years, surgeons have performed scalene node biopsies, usually only for palpable nodes. Carlen in 1959, described a method of biopsing mediastinal nodes by mediastinoscopy. The procedure he described has a low morbidity, little postoperative pain, and can be accomplished in poor risk patients. Mediastinoscopy may eliminate the need for thoracotomy in certain situations, e.g., oat cell carcinoma, or poor risks patients. It should be noted that the finding of nodes containing metastatic tumor at mediastinoscopy does not of itself exclude resection in some cases.

Fiberoptic bronchoscopy has opened up a great many more areas of the lung to direct vision and biopsy than were previously available with the rigid bronchoscope. The number of diagnoses made by endoscopic procedures is increased by this method. As with mediastinoscopy, certain patients may need no further operative procedure, if the diagnosis can be made with the bronchoscope.

The various radioactive scans (liver, bone and brain) and the use of the CAT scan, in selected cases, may produce evidence of distant metastases. The presence of distant metastases still is, in most cases, a contraindication to surgery, and positive findings in these procedures will reduce the number of futile thoracotomies.

Recently, percutaneous needle biopsy of the lung has come into wide use. This procedure would seem to have special value in high risk patients in whom a diagnosis is needed for further therapy, oat cell carcinoma cases and cases with known distant metastases. It should be recognized that needle biopsy of the lung may be complicated by a significant incidence of pneumothorax (24 percent total, 14 percent requiring chest drainage in one series).

Radiation therapy still remains the primary treatment for the nonresectable patient without distant metastases. Preoperative radiation has not received wide acceptance except in superior sulcus tumors causing Pancoast syndrome.

In resected cases with squamous cell carcinoma and mediastinal node involvement, Kirsh et al found that survival was materially improved by radiation therapy postoperatively. In the same series, survival was not improved in resected cases of adenocarcinoma with positive nodes who had postoperative irradiation.

Postoperative irradiation has been of great value in nonresectable cases not only in reducing pain and hemoptysis but also by decreasing in tumor size thereby lessening symptoms caused by the volume of the tumor. Still, the cure rate with radiotherapy has remained disappointingly low.

Chemotherapy has shown some promise in the treatment of oat cell carcinoma, and seems to be in general use at this time. On the other hand, chemotherapy has not been widely used for other lung tumors.

In summary, the past decade has not produced much real improvement in the overall survival rate for carcinoma of the lung. It may be that this improvement will have to await the success of educational and legal battles against smoking. In the meantime, the principle advances seem to be in the refinement of diagnostic techniques allowing more careful selection of the method of treatment. The result will be a better survival rate for those persons who have surgery and a reduction of hospitalization, pain and expense in those patients who cannot benefit from surgery. When obliteration of the patient's disease is not feasible, relief and prevention of pain and suffering has always been a primary aim of the medical profession. Perhaps we are doing this with carcinoma of the lung.

References are available from the author upon request.

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**My definition of success is this: the power with which to acquire whatever one demands of life without violating the right of others. — Andrew Carnegie**

# Tracheal Stenosis-Surgical Management

## A Case Report

Francis N. Cooke, M.D.

In the past decade, there have been tremendous advances in the care of the seriously ill patient. Notable among these medical advances, has been the development of the inhalation therapy (respiratory therapy) departments, now functioning in most acute care hospitals. Sophisticated and sensitive respirators and machines which rapidly and accurately analyze blood gases, have given tremendous impetus in this area of medicine. Controlled or assisted respiration is commonplace in the special care units of the modern hospital. The complications avoided, and the number of lives saved by these methods, would be difficult to enumerate but the effectiveness can be attested, by all clinicians, who have availed themselves of these special services; however, despite the life-saving machines and techniques, there is a late complication of controlled respiration which has been quite distressing to both physician and patient.

That is the development of tracheal stenosis in an appreciable number of those patients who have been rescued from the almost certain death of respiratory failure.

Cooper and Grillo[1] and Andrews and Pearson[2] have studied extensively and published in a convincing manner, a series of articles on the pathogenesis and incidence of this relatively new surgical problem. The recommendations of these authors[1,2] and others[3] for a low-pressure cuff, greater attention to operative techniques of tracheotomy and post-tracheotomy care, better control of the seemingly ever-present infections, have undoubtedly reduced the incidence of tracheal injury. Despite these measures, however, there apparently will be a certain percentage of patients requiring assisted respiration, who will develop tracheal stenosis of such a degree as to require surgical intervention.[4,5]

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The purpose of this paper is to report a case of tracheal stenosis following ventilatory support and to describe a method of surgical treatment.

### Case Report

MW, 56-year-old, white female, admitted to Doctors' Hospital Coral Gables, Florida, September 23, 1974, with an accidental overdose of Doriden. She remained comotose for 8 days and subsequently made a complete recovery. During her comatose state, an endotracheal tube, for controlled respiration, was used for 3 days, followed by a tracheostomy with a low-pressure cuffed tube. This was removed 10 days later. The tracheostomy healed without incident and the patient was discharged. On November 2, 1974, she was admitted to a Long Island, New York hospital, where a diagnosis of tracheal stenosis was confirmed by tracheal tomography. Bronchoscopy and dilitation was performed with a #32 FR dilator, with considerable symtomatic improvement. In April 1975, stridor recurred and the patient was readmitted to Doctors' Hospital. Tracheal tomography reported "narrowing of mid-trachea (stomal stricture) approximately (Fig. 1) 2 cm. long and a reduction in the lumen, at one point, to 5 mm." On May 9, 1975 a tracheostomy was performed over a small peroral endotracheal tube. A longitudinal incision was made in the trachea directly over the tracheal stenosis. The walls in the area of the stenosis were epithelialized and smooth and there was no granulation tissue. However, there was considerable loss of the substance of the anterior portion of the cartilaginous rings. A tracheostomy tube was placed and the incision was closed loosely. At a second operation, 10 days later, a tantalum plate, with numerous perforations, and molded to conform to the anterior wall of the trachea, was sutured into the longitudinal tracheostomy incision with monofilament wire sutures. (Fig. 2) The gusset of tantalum effectively provided an tracheal lumen. The patient was able to breathe through

Figure 1

Figure 2

adequate tracheal lumen. The patient was able to breathe through the perforations in the plate and endobronchial secretions were sucked away as they appeared on the prosthesis. The wound was left open. In essence, a tracheostomy, with a tracheostomy tube, was converted to a tracheostomy with a flat, or almost flat, prosthesis. Postoperatively, there was no apparent difficulty keeping the tantalum plate clean of secretions. After recovering from the anesthetic, the patient managed the secretions quite well, herself. Breathing was unobstructed, since the cross section of the perforations was much larger than the diameter of the tracheostomy tube, which had been replaced. Wound healing progressed rather rapidly. The patient was discharged to outpatient care, with a large part of the tantalum plate still exposed. Two months later the patient was readmitted for revision of the scar. At this time, a small part of the plate and two perforations in the plate, were still exposed to the air. Skin flaps were developed and closed about a small catheter which acted as a *vent* and *drain*. The skin and underlying tissues closed about this small drain in 2 weeks and the drain was removed. When the wound was completely healed, tracheal tomography revealed that "the trachea appears to be quite open with no residual stenosis evident."

On a later admission, February 12, 1976, a scar revision, for cosmetic reasons, was done, allowing the opportunity for bronchoscopy. The tracheal lumen was widely patent, no granulation tissues could be seen and epithelization of the prothesis was apparently complete. The patient has remained well to date. (Fig. 3)

## Discussion

There are numerous articles in the medical literature describing the various techniques and materials used in tracheal reconstruction.[6,10] Despite the ingenious methods and techniques, prosthetic devises have not, in general been accepted[4] in the treatment of tracheal

Figure 3

stenosis. Neville,[11,12] on the other hand, has persevered in the belief that tracheal prosthesis are, at times, essential and has developed a prosthesis of silicone and copolymer, in a range of sizes and shapes. In his hands, these have been quite satisfactory in tracheal and tracheobronchial reconstruction. Grillo[4] and Pearson,[5] in avoiding the use of a prosthesis, developed techniques, in which long segments of involved trachea have been successfully resected and tracheal continuity re-established by end-to-end anastomosis of the trachea.[45] The development of these operative techniques has added much to our surgical knowledge and armamentarium; however, these are surgical procedures of considerable magnitude and, of course, morbidity and mortality will be present in an appreciable number of those operated. This is particularly true when one realizes that many of these patients are also suffering from chronic pulmonary disease.

To avoid the extensive surgery of the circumferential resection in the patient presented here, I attempted to find another approach to tracheal stenosis in the cervical area.

In the past, in both the experimental and clinical work in the use of a tracheal prosthesis, considerable effort and attention has been expended to avoid infection about the prosthetic device. Since this is difficult, if not impossible, to accomplish, particularly in this area, it was decided to accept the fact that infection would always be present, both from within the trachea and also externally from the open wound. The material used therefore, must be well tolerated by the tissue and not harbor infection, ie: tantalum plate and monofilament wire. As it developed, infection was not a problem. The neck was carefully examined during the postoperative period, for any evidence of local swelling, inflammation, or subcutaneous emphysema. None of these occurred.

Our next concern was whether epithelization inside of the prosthesis would keep pace with the external wound closure. This, again, did not present a problem.

We anticipated that a forceful cough might cause endotracheal bleeding from the granulation tissue; however, none occurred. Within a week the prosthetic device was firmly fixed in the clean healing wound. We had anticipated one or more skin flap revisions before

complete wound closure. However, one wound revision was necessary, before complete healing. The patient has remained well, with no recurrence of symptoms to date.

## Conclusion

The case presented here represents stomal stenosis or stenosis developing at the site of the tracheostomy. This type of stricture lends itself quite well, I believe, to the surgical techniques described in the case report.

With the use of the low pressure cuff tracheostomy tubes and improved tracheostomy care, tracheal injury, due to the cuffs, which is often below the cervical trachea, hopefully, will become less of a problem and sleeve or circumferential resection of the trachea, less frequently indicated. However, because of the increasing number of patients requiring and receiving assisted respiration, the number of stomal strictures will conceivably be with us for some time. The method, described here, may be quite helpful in management of those unfortunate patients who develop tracheal stenosis at the site of the stoma.

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**It is with nostalgic feelings**
**I now think of past medical dealings,**
**For it was a rather simple life**
**Compared to portend of bureaucratic strife.**

**PSRO, CME, Audits and such**
**Are in your future bag of stuff,**
**MCE, performance patterns, and regionalization**
**Will forever replace compassion and communication.**

**Delegation, data abstraction, and collective orientation**
**Are heaped upon variation, validation and justification.**

**When that times comes not far off**
**To cross the one-way path to Iberia,**
**I fear Mr. Califano's delegate is waiting at the gate**
**To say, "Sorry, you don't meet the criteria."**


**Harry Rosenfeld, M.D.**
**South Miami**


At the final meeting of Dr. Rosenfeld's term as President of the Medical Staff of the Larkin General Hospital, he gave the above farewell address in verse.

# Twelve Years Experience with Thoracic Outlet Syndrome

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The history of thoracic outlet syndrome, as it is known today, was recorded by such men as Hilton, 1853,[1] Coote, 1861,[2] Poland, 1869,[3] and Halsted, 1909 and 1916.[4] This information on vascular complications of thoracic outlet syndrome points to the fact that surgeons have been interested in this syndrome for more than a century.

In the physiology of vascular and neural compression, regardless of the etiology, the common denominator is compression of the structures over the first rib. The arterial complications and etiology have been adequately described by Holman,[5] Telford,[6] Louis,[7] Baird[8] and Todd.[9] Clagett,[10] made this a topic for presidential address before the American Association for Thoracic Surgeons, published in 1963.

## Anatomy

The first rib is almost flat on the superior aspect and C-shaped. On its middle anterior surface are two transverse grooves separated by the anterior scalene tubercle. Occasionally the first rib is J-shaped, with less mobility than its normal C-shape allows. The scalenus anticus and medius muscles act by elevating the first rib toward the clavicle, especially in forced inspiration. Upon contraction, the intercostal muscles lower the first rib and the trapezius muscle raises the clavicle. The brachial plexus is formed by the anterior primary rami of the five spinal nerves, C 5-8 and T 1, with variable contributions from the fourth cervical and second thoracic nerves. These rami form three trunks which then divide and reunite into the posterior, lateral and medial cords. Occasionally C 4 is prominent with a small contribution from T 1, or T 5 is absent with a major contribution from T 2, the pre and post fixed plexus. The sub-clavian artery leaves the thorax by arching over the first rib behind the scalenus anticus muscle; it then passes under the subclavius muscle and clavicle and enters the axilla behind the pectoralis minor muscle. Occasionally the artery passes through the scalenus anticus muscle. The median cord of the brachial plexus lies posterior and lateral to the artery, and rarely it may pass through the scalenus medius muscle. It generally follows the route of the subclavian artery. The subclavian vein has an identical route as the artery except that it passes anteriorly to the scalenus anticus muscle.

Potential sites of compression are the intervertebral foramina, the interscalene triangle, the cervico-axillary canal, and the axilla including the pectoralis minor with its insertion on the corocoid process plus the "scissor-like" encirclement of the axillary artery by heads of the medial nerve. Detailed anatomical descriptions have been published by several authors.[11]

## Etiology

Muscular exercises such as seen in athletes may result in an increase in bulk of the subclavius muscle or the scalenus anticus muscle, decreasing the space in which the artery, vein and nerves must pass. On the other hand, astenic individuals with poor muscular tone and reduction of muscular mass may have sagging of the shoulder girdle with a decrease in the thoracic outlet space. This accounts for many of the cases of spontaneous onset of this syndrome occurring in middle aged people. Congential factors include cervical ribs, bifid clavicle, and bony protubernance of the first rib causing pressure on the vessels and nerves. Abnormal insertions of the scalenus anticus and scalenus medius can likewise contribute to thoracic outlet syndrome. Trauma has been the precipitating factor in over 50 percent of my cases, such as blows about the shoulder, head and neck. Certainly "whip lash", a flexion and extension type of injury to the neck, can cause the scalene muscle to become thickened and fibrosed. This results in narrowing of the thoracic outlet, with possible irritation and pressure of the brachial plexus, plus compression of the subclavian vessels. Fibroses and contracture of the scalene muscles may result in elevation of the first rib and stretching of the structures passing over the rib. Other etiological factors can be fractures or tumors of the clavicle, sub-acromial dislocation of the humoral head, and a crushing injury of the thorax. Other conditions implicated in narrowing the thoracic outlet are cervico-dorsal scoliosis, developmental abnormalities of the clavicle, first rib and costocoracoid ligaments, and repeated and prolonged hyperabduction (seen in painters, airplane pilots, grease pit mechanics and people who work in the engine rooms of tankers.)[12]

## Signs and Symptoms

Symptomatology of thoracic outlet syndrome is dependent on singular or combined compression of the nerves, artery and vein. The duration of the compression dictates the severity of symptomatology.

Arterial compression results in ischemic symptoms secondary to intermittent compression of the subclavian artery which includes numbness, coldness, weakness and discoloration of the hand, with a "glove like" area of paresthesia and pain of the arm and hand. Severe arterial compression can result in ulceration or gangrene of the fingers and hands and can precipitate over activity of the sympathetic nervous system, resulting in causalgia. The lancinating pain produced may last as long as five or six months, even after the pressure on the vessels have been relieved. Consequently, the presence of causalgia is an indication for doing a sympathectomy at the time of surgery for thoracic outlet obstruction. A typical Raynaud's phenomenon can exist from intermittent compression of the subclavian artery. If thrombosis occurs the pain is usually constant, whereas, the pain of neuritis is intermittent.

In venous obstruction, edema and cyanotic discoloration of the extremity are characteristic findings with dilatation of the superficial veins of the extremity and about the shoulders.

The symptoms of neural compression are protean: Paresthesia, numbness, dysfunction of the extremity, dropping of objects, impairment in handwriting, inability to comb the hair or reach for objects over the head. Severe headaches are very common, usually orginating in the posterior occipital region and radiating to the frontal areas, quite frequently behind the eye of the affected side. Blurring of vision, difficulty in concentrating and change in personality (such as irritability and depression) are present. Other complaints include pain and stiffness in the shoulder muscles, elbow joint pain, anterior chest wall pain in the region of the breast, and back pain. These people are sometimes unable to carry out their normal daily activities and some are completely incapacitated. On the other hand, the symptoms of nerve compression may be so subtle, such as impairment of handwriting, that they go unrecognized.

## Physical Examination

On physical examination the posture assumed relative to shoulders, arms and neck and the anxiety observed is helpful. Ulnar nerve sensory loss is apparent in the medial aspect of the forearm and the sensory nerve distribution of the hand. Instrinsic muscular atrophy of the hands may be present. Finger incoordination is present with motor flexion weakness of the hands. Adson's test and a Modified Allen's maneuver, i.e., the arms at 90° abduction and external rotation, may or may not be positive with obliteration or diminution of the radial pulse. With both arms at 90° abduction and external rotation, rapidly clenching the fingers, patients with thoracic outlet syndrome quickly develop pain in the shoulder and extremity or they experience a feeling of heaviness of the extremities within a few months. Swelling and distention of the veins may be present. There may be spasm and tenderness of the trapezius muscle as well as tenderness in the supraspinous and infraspinous, para-scapula and paracervical muscle groups. In neural compression, pressure over the scalenus anticus muscle is usually extremely painful with the pain radiating down the ulnar nerve distribution to the arm or to the pectoral and parascapular regions. Occasionally the pain may radiate to the posterior occipital area. If a cervical rib is present, it can be palpated in the neck.

## Differential Diagnosis

Conditions that may have similar symptoms of a thoracic outlet syndrome include carpal tunnel syndrome, cervical discs, cervical arthritis, cord tumors of the brachial plexus, bony exostosis, coronary artery insufficiency, cervical neuritis, tendinitis, bursitis, multiple sclerosis, brachial plexus injury, Raynaud's phenomenon, shoulder hand syndrome and pancoast tumors. None of these conditions however, have symptoms and signs of neurological, venous or arterial compression relative to arm position and use.[13]

## Subjective and Objective Diagnostic Tests

The most important means of establishing a correct diagnosis is a detailed history and careful physical examination. The various diagnostic maneuvers such as Adson's and Allen's test, can only confirm, not establish the diagnosis of thoracic outlet syndrome. Pain produced by supraclavicular compression is considered a pathognomonic sign in thoracic outlet syndrome with brachial plexus compression.

Arteriography of the subclavian artery in a resting and hyperabducted position can demonstrate narrowing in the area of the first rib. However, it is infrequently helpful unless one suspects an aneurysm or intrinsic arterial disease.

Venography can be helpful in cases of subclavian vein thromboses. X-rays of the cervical spine and chest will show cervical ribs, narrowing of the disc space, bony encroachment of the foramina and other conditions which may complicate or coexist with a thoracic outlet syndrome.

Electrodiagnostic studies such as nerve conduction velocity tests to evaluate motor and sensory conduction of the median and ulnar nerves may be used to identify the site of compression when the symptoms are of a neurological basis; however, many physicians disagree with this concept.

## Treatment

Most patients with mild to moderate degrees of thoracic outlet syndrome can be treated successfully by physio-therapy, muscle strengthening exercises to the upper extremities, and avoidance of posture that aggravates the condition. If conservative treatment is not successful in relieving the symptoms or if the symptoms become more severe, then surgical decompression is indicated.

The various approaches for removal of the first rib are: parascapular, supraclavicular, infraclavicular and transaxillary. The surgical technique in this series for removal of the first rib was through the axilla, a modification of Roos' technique.[14]

Postoperatively, there is usually numbness in the distribution of the intercostobrachial cutaneous nerve or painful dysathesia, which usually clears within a period of eight months.

## Results

To date, there have been 256 surgically treated patients. The total number of operations is 351, which indicates bilateral procedures on 93 patients. The right and left side were almost equally divided, 175 being on the right and 176 on the left. Age ranged from 14 years to 71 years, **the average age** being 38 years. One hundred and ninety seven females and 59 males were operated, a ratio of a little better than three to one. Duration of symptoms prior to operation ranged from five weeks to 16 years, with an average of 15 months. Nerve conduction velocity studies over the thoracic outlet were performed in a majority of the surgical patients, the lowest conduction time being 16 m/sec. and the highest conduction time, 66 m/sec.

Trauma was involved in the etiology in 145 patients. Spontaneous onset occurred in 111 patients.

## Comments

It is felt that the physical findings and symptoms of neural compression, i.e., muscular tenderness, headaches, etc., are based on the innervation of the muscles involved by branches of the brachial plexus. The nerve distribution is divided into a supraclavicular group innervating mainly the muscles of the neck and trunk and an infraclavicular group innervating the upper limb. Headaches are believed secondary to paracervical muscular spasm, causing pinching of the greater and lesser occipital nerves. Some case in the series have previously had neurectomy of the occipital nerve to relieve headaches by a neurosurgeon without relief.

The patients seen have usually been on a multitude of medications which included antidepressants, depressants, and large quantities of analgesics. They have been seen by numerous physicians, the syndrome unrecognized, and a diagnosis of neuroses of anxiety established.

Ninety per cent of the patients have had good to excellent recovery with minimal or no complaints, returning to full time employment and activities enjoyed prior to the onset of thoracic outlet syndrome. Poor to fair results were achieved in patients where compensation, liability claims, and drug abuse were involved; such people must be screened very carefully prior to surgery, as were all patients in this series.

It is also interesting that 36.3% of the patients had bilateral operations. This indicates the effectiveness of the procedure and the willingness of these patients to undergo surgery rather than suffer the debiliting and painful symptoms of this syndrome. These patients have failed to respond to appropriate conservative treatment, which must include physio therapy.

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# The Use of a "Pectoralis Sling" as a New Technique in the Repair of Pectus Excavatum

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The necessity of repairing chest wall deformities of the excavatum variety has been recognized for a long time. The reasons for repair are usually cosmetic and psychological in nature, but also related to the cardiopulmonary derangement as reported by several investigators[4,6,9]. Controversy still exists regarding what constitutes the best operative technique. From the original technique of Brown[2] with external fixation, to Sweet's technique[12] of suspension by reattaching the transected costal margins to the sternum, the concept of repair has gradually evolved. Ravitch has defined some essential features of this operation:[10]

1. Resection of the involved costal cartilages in a subperiostial fashion

2. Plastic repair of the deformed sternum by means of osteotomies

3. Resuspension of the corrected sternum in a physiologically corrected position.

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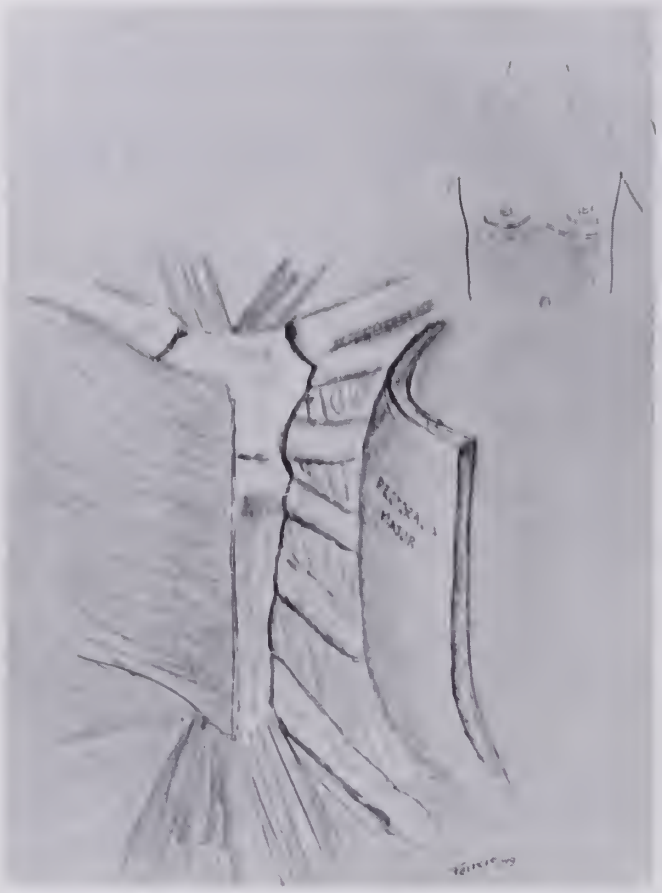
It is this last concept that has given rise to considerable controversy which points to the inadequacies of the techniques previously employed. It is now apparent that external stabilization of the newly formed sternum is met with not only discomfort and suboptimal results, but also with definite morbidity and mortality. Complications range from dislodgement and visceral perforations resulting from Steinmann pins or Kirschner wires to infections and tissue necrosis resulting from the use of Jacob's ladders or other traction devices. Internal fixation either with the use of metal struts[1,6,11] or the use of substernal rib grafts[3] has also produced a high incidence of complications and suboptimal results.

For these reasons a new technique of suspension and stabilization of the sternum has been developed by the authors, and utilized over the last three years in four patients ranging from five to twenty-eight years of age. Although cardiopulmonary physiological parameters were not obtained, all of these patients were asymptomatic, surgery being performed primarly for cosmetic and psychological reasons.

## Technique

The operation is performed according to the classic principles described by Ravitch.[7,8,9] With general endotracheal anesthesia and the patient in a supine position, a bilateral inframammary transverse incision is made ($F_2$). Skin flaps are then developed in all four directions, superiorly extending to the clavicles, inferiorly to the



◀ Fig. 1—The pectoralis major muscle is mobilized as a wide flap in preparation for the "sling." Note the extent of the skin flap as a shaded area in the upper insert.

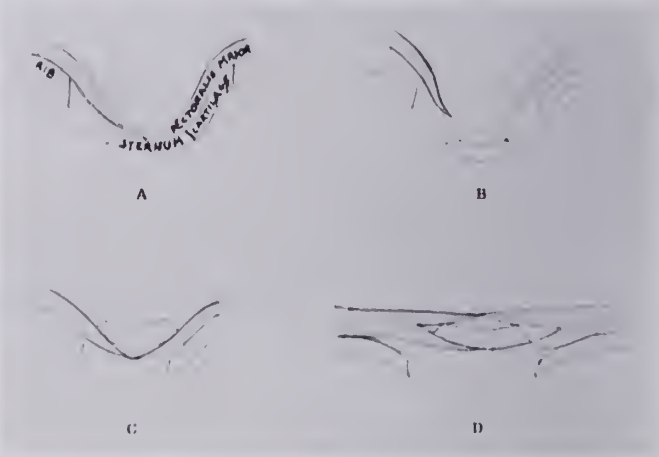



Fig. 3—Diagrammatic representation of the anterior chest wall reconstruction in cross section. (A)-normal relationship of structures, (B)-resection of costal cartilages, (C)-development of the "sling", (D)-finished repair.

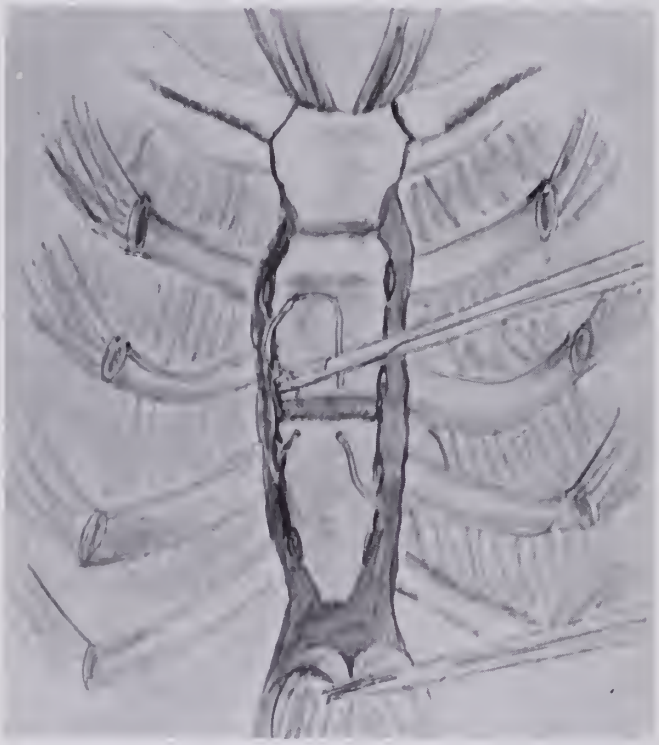


Fig. 2—With the costochondral cartilages excised, the sternum is being fixed in an over corrected position after the osteotomy with a no. 5 stainless steel wire.

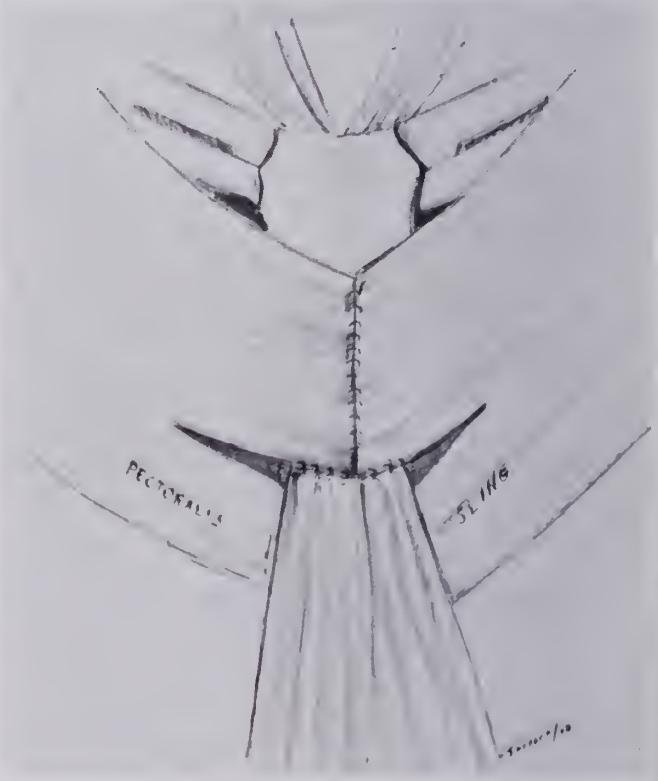



Fig. 4—Surface view of the completed repair. Note the advancement of the pectus sheath flap to the inferior margin of the pectoralis muscle.

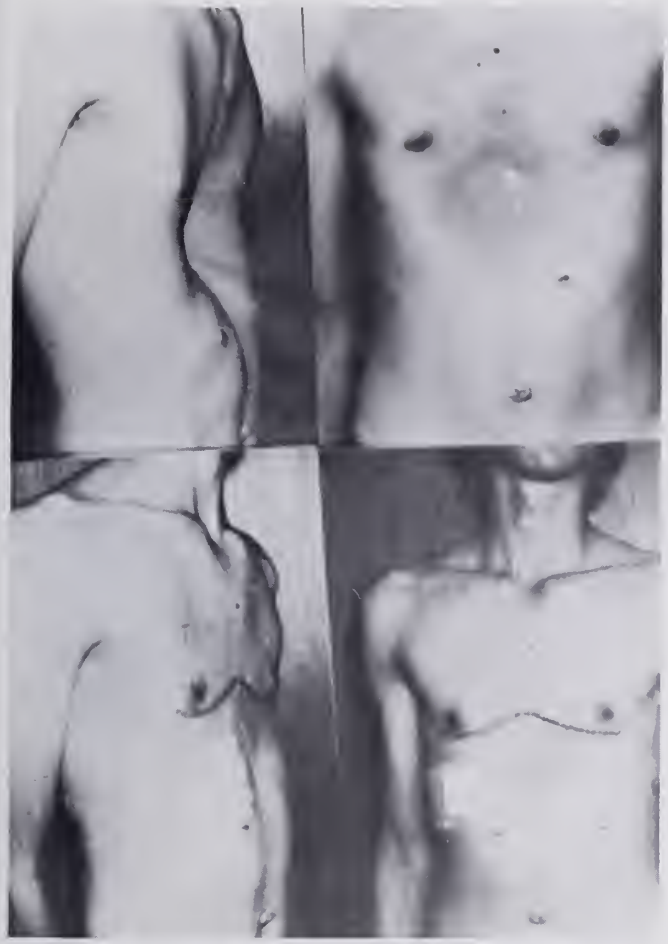


**Fig. 5—Preoperative and postoperative photographs of one of the patients in our series.**

umbilicus and laterally to the anterior axillary lines. The pectoralis major muscle is then detached from the sternum with the electrocautery, and the dissection is carried laterally to the anterior axillary line. At this point the muscle is detached superiorly from the clavicle (Figure 1). The pectus sheath is then detached from the xyphoid process, and dissected off the inferior rib cage to the level of the umbilicus, remaining in an extraperitoneal plane.

With the costal cartilages exposed, the involved segments are resected subperiostially (Fig. 2). By means of blunt and sharp dissection, the sternum is then freed of its mediastinal and intercostal attachments. A transverse cuneiform osteotomy of the sternum is performed on the anterior table, at the start of its downward abnormal curvature. The sternum is then bent forward in an over corrected position and fixed in place by means of a mattress sutures of stainless steel wire. No intentional efforts is made to enter the pleural space.

Resuspension and stabilization of the sternum is performed by first dividing a sling of pectoralis major muscle with the electro cautery; the muscular sling is brought **under** the sternum and secured by means of heavy non-absorbable sutures. The remaining portion of the pectoralis is then approximated **over** the sternum with the same suture material (Fig. 3). The lower portion of the sternum is covered by the previously developed pectus flap which is secured to the pectoralis muscle (Fig. 4). A suction catheter previously positioned under the sternum in the anterior mediastinum is employed for postoperative drainage. The skin is subsequently approximated in a two layer closure over a second suction catheter.

Utilizing this technique of suspension and stabilization of the sternum, none of our patients required postoperative respiratory support. There were no instances of flail chest, and all patients were discharged from the hospital in six to ten days. The postoperative cosmetic results have been excellent (Figure 5) without complications often seen with the use of either external or internal fixation techniques previously described. The advantages of our technique are quite obvious: the utilization of an endogenous viable muscular support which provides dynamic stabilization of an unstable sternum, resulting from the costal cartilage resection and sternal osteotomies.

An additional advantage of this technique is its applicability to older patients. Our oldest patient is twenty-eight years old, and the pectoralis sling is even more effective, because of better development of the musculature.

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# Atrial and Atrioventricular Sequential Pacing
# Rationale and Clinical Experience

Diego A. Bognolo, M.D., R.R. Vijayanagar, M.D., and Paul F. Eckstein, M.D.

**ABSTRACT: The rationale for atrial and atrioventricular sequential pacing is based on the preservation of normal cardiac output and atrioventricular synchrony. The experience obtained in 16 consecutive cases and the large volume of data available in the literature, confirm that these forms of pacing are, at present, easily available, simple and reliable.**

Since the introduction of therapeutic electrical stimulation of the heart in 1952, the techniques of ventricular pacing have been optimized and the indications expanded. In the past 10 years, there has been an active interest toward pacemaker concepts that restore natural cardiac function and preserve proper atrioventricular synchrony and normal cardiac output. Such pacing systems are now available and highly reliable.

This report concerns our experience with permanent atrial and atrioventricular sequential pacing in the past two years.

## Clinical Material, Methods of Implantation and Results

Since February, 1978, 13 atrioventricular and 3 atrial pacing systems were implanted in 15 consecutive patients, aged 34 to 78 years. There were 9 men and 6 women. Patient data and the primary indications for pacing are listed in Table 1. The predominant indication was Sick Sinus Syndrome (9 cases), followed by "pacemaker syndrome" (3 cases) and heart block (3 cases). Four patients in the series had previously implanted pacemaker systems (3 ventricular, 1 atrial).

All patients underwent some form of evaluation of the conduction system, either by HIS Bundle studies or by atrial pacing at progressively increasing rates in the operating room at the time of implantation (1:1 conduction at atrially paced rates of 130 ppm was assumed as a sign of intact A-V conduction). The transvenous route was the technique of choice. All epicardial implants were performed concomitantly with coronary revascularization or valve surgery. General anesthesia was preferred; local anesthesia was utilized in three cases. Bipolar lead systems were used in all cases (Figs. 1, 1a,2,2a) with the exception of Case #9 where a pre-existing unipolar ventricular lead was successfully utilized for an atrioventricular sequential system. Tined "J" atrial leads (Medtronic 6990) were used to pace the atrium transvenously, and were positioned utilizing "C" arm fluoroscopy and the image intensifier. Epicardial atrial pinch-on leads (Medtronic 6995) were placed on the wall of the right atrium in the course of open heart surgery. Standard transvenous bipolar ventricular leads with tip to ring electrode spacing no greater than 1.5 cm (Medtronic 6902) were used for right ventricular pacing. "Screw-in" epicardial leads (Medtronic 6917A) were placed less than 1.5 cm apart on the left ventricular wall in the epicardial pacing systems. Thresholds and endocardial signals were measured in the standard fashion with an external analyzer (Medtronic 5300 PSA).

The pulse generators used were: A-V Sequential programmable (DVI) in 13 cases (Fig. 3), atrial demand programmable (AAI) in 3 cases (Xyrel AP-Xyrel VP Cordis atomic powered Omni-Stanicor).

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*The illustrations of the physiologic pacing appearing in the article have been provided courtesy of Medtronic, Inc.

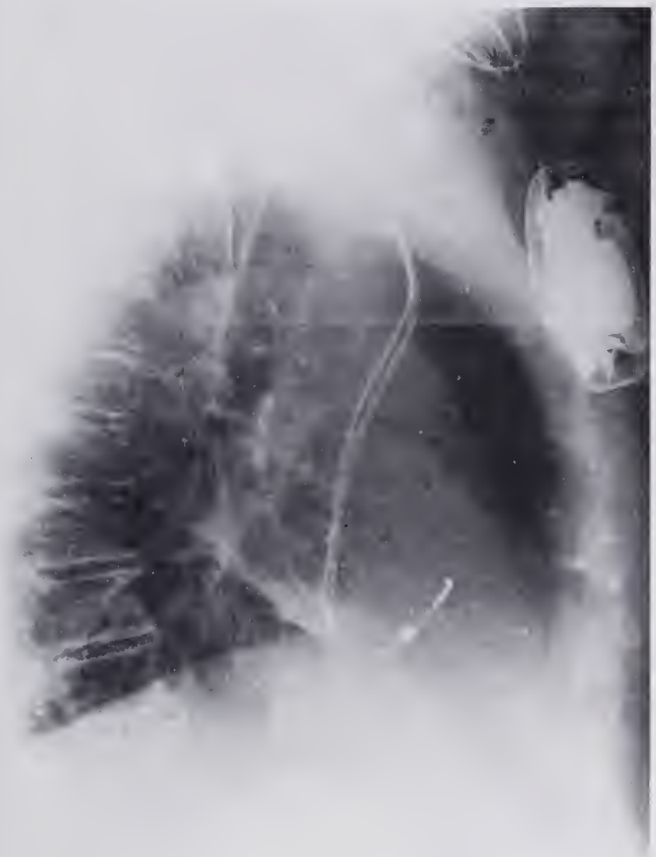

Fig. 1a

Fig. 1b

Fig. 1 a-b—Illustrative x-rays of transvenous leads.

Fig. 2 a-b—Illustrative x-rays of epicardial leads.

Fig. 2a

Fig. 2 b

## Complications

Transient intermittent loss of capture (ventricular in 1 case, atrial in 1 case) occurred, but corrected spontaneously. Intermittent undersensing was observed in one case of atrial inhibited pacing (Case #5). One patient with an atrial pacemaker developed a pulse generator pocket infection and skin erosion of the atrial lead over the clavicle. The same patient also developed intermittent heart block three months after implantation of the atrial system, requiring conversion to atrioventricular sequential. In no instance was lead repositioning required. There were no operative deaths.

## Results

All patients in the series have enjoyed a significant subjective improvement. Syncope and severe dizzy spells did not recur; improvement of angina pectoris was observed in the four patients who had such complaints

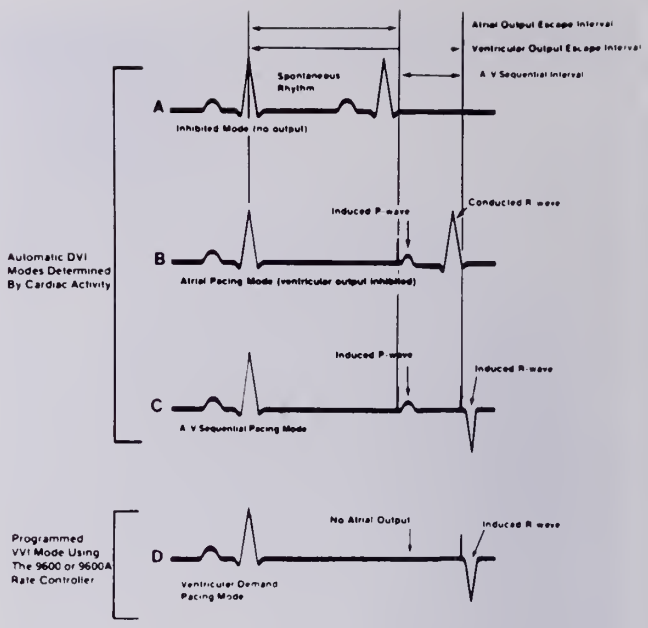


Fig. 3—Schematic description of atrioventricular sequential demand pulse generator operation.

| # | AGE | REASON FOR PACING | LEADS | PACING MODE |
|---|---|---|---|---|
| 1 | 65 | Bradycardia, SA Arrest | Epicardial 2 Atrial — 2 Ventric. | A-V Seq (DVI) |
| 2 | 66 | Tachy-brady Syndrome | Atrial "J" Bipolar Ventric. Bipolar | " " |
| 3 | 72 | Bradycardia, Ventric. Irritability | Epicardial 2 Atrial — 2 Ventric. | " " |
| 4 | 57 | Sick Sinus Syndrome, "Pacemaker Syndrome" | Atrial "J" Bipolar | Atrial (AAI) |
| 5 | 71 | Sinus Bradycardia Ventric. Tachycardia | " | " " |
| 6 | 65 | Intermittent Heart Block | Epicardial 2 Atrial — 2 Ventric. | A-V Seq (DVI) |
| 7 | 63 | Tachy-brady Syndrome | Atrial "J" Bipolar Ventric. Bipolar | " " |
| 8 | 61 | Sick Sinus Syndrome Ventricular Ectopy | " " | " " |
| 9 | 79 | Sick Sinus Syndrome, "Pacemaker Syndrome" | " Pre-existing Ventric. Lead | " " |
| 10 | 57 | Sick Sinus Syndrome Intermittent Heart Block | Atrial "J" Bipolar Ventric. Bipolar | " " |
| 11 | 34 | Sick Sinus Syndrome, "Pacemaker Syndrome" | Atrial "J" Bipolar | Ventric. (AAI) |
| 12 | 78 | Bradycardia, SA Arrest | Atrial "J" Bipolar Ventric. Bipolar | A-V Seq (DVI) |
| 13 | 77 | Tachy-brady Syndrome | " " | " " |
| 14 | 65 | " " | " " | " " |
| 15 | 77 | Sick Sinus Syndrome Intermittent Heart Block | " " | " " |
| 16 | 58 | Trifascicular Block, Syncope | Epicardial 2 Atrial — 2 Ventric. | " " |

Table I

prior to pacemaker implantation. Six patients with Sick Sinus Syndrome who had predominant tachyarrhythmias showed successful response to pacing within the first three weeks after implantation, and no further attacks were demonstrated. All of these patients, however, were maintained on their preoperative antiarrhythmic drugs.

Increased functional capacity and disappearance of dizzy spells, weakness and orthostatic hypotension episodes was dramatically observed in the three patients who had required conversion of ventricular pacing into atrial or atrioventricular sequential pacing for treatment of the so-called pacemaker syndrome. (Cases 4, 9 and 11).

All patients have been followed by the transtelephonic system by the authors at regular intervals for periods ranging from 17 months to 4 weeks.

## Discussion

### Rationale for Atrial and Atrioventricular Pacing

The contribution of atrial contractions to the overall cardiac performance is a well known physiologic phenomenon. Since the original studies of Gessell,[1] after the introduction of artificial pacing, a large number of experimental and clinical studies confirming the hemodynamic importance of pacing the atria for preservation of cardiac output and for maintenance of synchronous atrioventricular contractions have appeared in the literature.[2-6]

A properly timed atrial contraction increases ventricular stroke volume by increasing end diastolic fiber length,[7] and completion of ventricular filling aids in the closure of the atrioventricular valves. Atrial contractions also lower mean atrial pressure with a resultant increase in venous return.[8]

In ventricular pacing, the synchrony of atrial and ventricular contractions is lost, and a state of ventricular pacemaker induced A-V dissociation is established. The clinical expressions of the loss of effective atrial contraction and the adverse effects of atrioventricular pacing are now more frequently identified and grouped under the term of "pacemaker syndrome".[9,10,11]

Cardiac decompensation has been observed in patients previously compensated after the institution of permanent ventricular pacing;[12] hypotension with light-

| COMPLICATIONS | APPROACH | ASSOCIATED CONDITIONS | FU |
|---|---|---|---|
| — | Epicardial | CAD | 18 mos. |
| — | Transvenous | Cerebrovascular Insufficiency | " |
| — | Epicardial | Aortic Valve Replacement | 9 mos. |
| — | Transvenous | CAD | 8 mos. |
| Intermittent Undersensing A-V Block Infection/Lead Erosion | " | " | 6 mos. |
| — | Epicardial | Mitral Valve Replacement | " |
| Intermittent Loss of Ventric. Capture | Transvenous | CAD | 5 mos. |
| — | " | — | 4 mos. |
| — | " | Aortic Insufficiency | " |
| — | " | — | " |
| Intermittent Loss of Atrial Capture | " | — | " |
| — | " | CHF | 3 mos. |
| — | " | CHF, Mitral Regurgitation | " |
| — | " | CAD-CHF | " |
| — | " | CAD | " |
| — | Epicardial | Aortic Stenosis | 2 mos. |

headedness and syncope, in spite of effective ventricular pacing, were recently reported Alicandri,[13] Thalen,[14] Harthorne.[15] Three such cases were also observed in our series (Cases 4,9 and 11); these required a change of the ventricular demand pacer to atrial or atrioventricular sequential systems which in turn produced dramatic symptomatic improvement.

Undesirable electrophysiologic derangements and rhythm disturbances, such as reciprocal beats due to retrograde conduction or even reciprocating tachycardias, may also be caused by traditional modes of cardiac pacing.[16] In contrast, atrial and atrioventricular pacing, have proved to be very effective in controlling coexisting tachyarrhythmias and intermittent atrial fibrillation by rendering the atrial tissue refractory to retrograde stimulation, thus preventing reciprocation or echos within the A-V junction and suppressing atrial and ventricular ectopic foci by overdrive.[17,18,19] Successful tachyarrhythmia control was observed by Fields,[20] in the majority of his cases after three months of atrioventricular sequential pacing. In six of our cases with predominant tachyarrhythmia, a positive response was obtained after three weeks of pacing and suppressant drugs.

## Technical Considerations

From the technical standpoint, the implantation of a atrioventricular sequential system involves the use of two bipolar leads (1 for the atrium, 1 for the ventricle). The atrial "J" leads are easily positioned in the right atrial appendage, even in patients who have undergone previous heart surgery.[20] The reported dislodgement rates compare favorably with the ones observed with ventricular leads (5-6%).[20,21,22] No dislodgement occurred in our experience and in 14 implants reported by Zucker.[23] Although the initial thresholds are two to three times higher than the ones observed in the ventricular leads, threshold excursions are much less common, and no author has as yet reported problems with exit block. Similarly, perforation of the atrium and thrombosis have not been observed. Potential problems do, however, exist when P-wave sensing is required by the atrial pacing system. Intermittent sensing malfunction was observed in one of the three patients in our series with P-wave inhibited atrial pacers. However, the atrioventricular sequential pacing system does not need P-wave sensing, and the atrial electrode is used only to stimulate the atrium (Fig. 3).

The functional mechanism of atrioventricular sequential demand pacemakers have been described elsewhere[20,24,25] and are schematically described in Fig. 3. In our study, Medtronic #5992 atrioventricular demand programmable pacemakers were used. Although this unit is of rather large size, no problems with erosion or infection were encountered.

## Patient Selection

Ventricular pacing is commonly the method of choice in the majority of cases requiring pacing. However in many patients for hemodynamic and electrophysiologic reasons, it is important or even mandatory to preserve proper A-V synchrony and normal cardiac output by either atrial or atrioventricular sequential pacing. The best candidates are patients with Sick Sinus Syndrome of the tachy-brady type in view of the antiarrhythmic properties of atrioventricular sequential pacing. Patients with low cardiac ouput from any cause, patients with prosthetic heart valves, and patients with angina pectoris enjoy most benefits from physiologic pacing. The choice between the use of atrial or atrioventricular sequential systems depends on the status of the conduction system. If HIS Bundle studies are not available, rapid atrial pacing at the time of implantation can be used successfully to select the proper form of pacing; atrial pacing can be used safely in patients who show 1:1 conduction at atrial rates of 130 ppm. Whenever in doubt, particularly when the patients exhibit abnormal QRS complexes, atrioventricular sequential pacing should be chosen for safety, in agreement with the data reported by Narula.[26] Patients with chronic atrial fibrillation are not candidates for atrial or atrioventricular sequential pacing because of irreversible loss of atrial function; atrial pacing can, however, minimize the tendency to atrial fibrillation in cases where this condition is intermittent.[18] In some resistent dysrhythmias, atrioventricular pacing can be of great value.[17]

## Conclusion

From the data available in the literature and our own personal experience, physiologic atrial and atrioventricular sequential pacing is simple and reliable. It should be the pacing mode of choice in all patients with borderline cardiac function and selected dysrhythmias.

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# Florida Pediatric Society Sponsors Fall Scientific Meeting

"Behavior Management in Pediatrics" is the theme for the Annual Fall Scientific Meeting of the Florida Pediatric Society. The sessions will be conducted Thursday, November 1, to Sunday, November 4, at the Ponte Vedra Club at Ponte Vedra Beach.

The meeting will get under way on Thursday afternoon with a session of the Executive Committee, followed by a reception and dinner. Scientific sessions on Friday and Saturday will offer participants the opportunity to earn 9½ hours of continuing medical education credit.

The final event is the business meeting on Sunday morning.

Scientific speakers will include:

John Curran, M.D., Associate Professor of Pediatrics, University of South Florida College of Medicine, Tampa; Dr. Susan O'Leary, Assistant Professor of Psychology, State University of New York at Stonybrook; Jack Sandler, Ph.D., Professor of Psychology, University of South Florida College of Medicine, Tampa; Richard Toister, Ph.D., Adjunct Professor of Pediatrics and Psychology, University of Miami School of Medicine, Miami; William D. Wolking, Ph.D., Professor of Special Education and Psychology, University of Florida, Gainesville; and Lee Worley, M.D., Associate Professor of Pediatrics, University of Miami School of Medicine, Miami.

Fees are $35 for members of the Florida Pediatric Society and $90.00 for non-members. Information may be obtained from the Society at P.O. Box 5411, Tallahassee, Fla. 32301.

# Current Status of Cardiac Valve Surgery

David A. Ott, M.D. and Denton A. Cooley, M.D.

Evolution of effective and low risk operations for valvular heart disease during the last three decades represents one of the major achievements in cardiologic therapy. Early surgical pioneers were limited in their efforts by the need to operate on the beating heart without the aid of cardiopulmonary bypass.[1-4] Thus, various ingenious techniques and instruments were devised mostly for opening stenotic valves.[5,6] Finger fracture or dissection of the stenotic mitral valve, introducing the index finger, with or without a finger knife, and using the left atrial appendage as the entry point, was not consistent and only moderately effective. These methods were improved considerably by use of mechanical dilators which could be inserted through a pursestring suture in the apex of the left ventricle. With the index finger of the right hand above the valve to guide the dilator into the mitral orifice, a controlled dilation of the valve could be achieved. Despite some problems, such as embolism, hemorrhage or induced valvular incompetence, results generally were good and even today in many less advanced countries are considered to be adequate. Similar techniques were developed for fracture of stenotic aortic valves, but results were not satisfactory. Such "blind" techniques for treating patients with valvular disease had many drawbacks and limitations—a major one being that valvular regurgitation could not be corrected.

With the advent of open heart techniques, first with induced body hypothermia and cardiac inflow occlusion and later with temporary cardiopulmonary bypass using pumps and blood oxygenators, the closed techniques have been discontinued in most cardiac centers. At present, the surgeon has available simplified, disposable equipment for cardiopulmonary bypass, permitting him to operate without blood to prime the extracorporeal circuit, and has a quiet, "dry" field as the heart is assisted by cold cardioplegic solutions containing potassium chloride.[7,8] These conditions permit accurate, direct vision assessment of the pathologic condition of the valve in order that the surgeon can plan a reconstructive or replacement method best suited for the needs of the patient. Moreover, as frequently occurs in patients with acquired valvular heart disease, the presence of concomitant coronary atherosclerosis may be corrected by myocardial revascularization using bypass techniques.

From the Division of Surgery of the Texas Heart Institute of St. Luke's Episcopal and Texas Children's Hospitals, Houston, Texas.

## Types of Valve Prostheses

During the ensuing evolution of surgery for cardiac valve replacement more than 40 different models of prosthetic valves have been introduced,[9] which is a fair indication that the ideal prosthesis has been difficult to perfect. Roberts[10] stated that the ideal heart valve prosthesis should be nonobstructive, competent, nonthrombogenic, durable and quiet. In addition, it must not alter the blood components. All of the prosthetic valves commonly used today meet these criteria in most respects, but none is perfect (Table 1).

Two basic types of valve prostheses are currently available: (1) the tissue valves, or bioprostheses, which are constructed of biologic tissue and imitate the human aortic valve in both structure and function, and (2) the mechanical valves which are constructed of synthetic materials and vary widely in design. The first valve prostheses which were implanted in the early 1960s had a ball-in-cage design (Fig. 1), for which the Starr-Edwards valve is the prototype. Numerous changes in design of this valve were made during the ensuing years in an effort to correct problems such as material failure, anatomic limitations, hemolysis, thromboembolism and other complications.

Another configuration for mechanical prostheses has been the tilting disc concept (Fig. 2) in which the valve occluder tilts open providing low systolic gradients across the valve, but also results in areas of relative stagnation of blood which predispose to thrombosis and fixation of the disc. The Cooley-Cutter valve (Fig. 3) is a caged-disc valve that consists of a biconical pyrolite carbon disc poppet housed in a titanium cage. More than 4,000 Cooley-Cutter valves have been implanted at the Texas Heart Institute alone, with favorable hemodynamic results and relative freedom from embolic phenomenon. The major disadvantage of all the mechanical valves is the necessity for long-term anticoagulation to prevent valve thrombosis and peripheral embolization.

Development of the tissue bioprostheses represents the latest achievement in the evolution of valve substitutes. Although some of the earliest prosthetic valves were constructed from homograft valve, dura mater or facia lata,[11,12] these valves were not durable and subsequently fell into disrepute. Recent advancements in

**Table 1. Valve prostheses in current use at the Texas Heart Institute, July 1978 - June 1979**

| Valve Type | Structural Design | Brand Name | Major Advantages | Primary Disadvantages |
|---|---|---|---|---|
| Mechanical Protheses: | Biconical caged disc | Cooley-Cutter | Low embolic rate<br>Nonhemolytic<br>Durable<br>Favorable hemodynamic characteristics | Noncentral flow<br>Anticoagulation required |
| | Caged Ball | Starr-Edwards | Low embolic rate<br>Durable | Noncentral flow<br>Hemolytic<br>Anticoagulation required |
| | | Smeloff-Cutter | | |
| | Tilting disc | Bjork-Shiley | Central flow<br>Durable<br>Nonhemolytic<br>Quiet | Tendency to thrombose<br>Anticoagulation required |
| Tissue Bio-prostheses: | Bovine pericardial xenograft* | Ionescu-Shiley | Excellent hemodynamic characteristics<br>Central flow<br>Nonhemolytic<br>Low embolic rate<br>Quiet<br>Anticoagulation not required | Durability yet to be proved for last 7 yrs. |
| | Porcine aortic valve | Hancock, Angel-Shiley | Central flow<br>Nonhemolytic<br>Low embolic rate<br>Anticoagulation not required | Durability yet to be proved for last 10 yrs.<br>Poor hemodynamic characteristics in small sizes |

*Current valve of choice at the Texas Heart Institute

Fig. 1—Hufnagel ball valve implanted in the descending thoracic aorta of a patient with severe aortic insufficiency in 1952.

Fig. 2—Bjork-Shiley valve demonstrating tilting disc design.

Fig. 3 — Cooley-Cutter valve demonstrating unique biconical pyrolite disc in titanium cage.

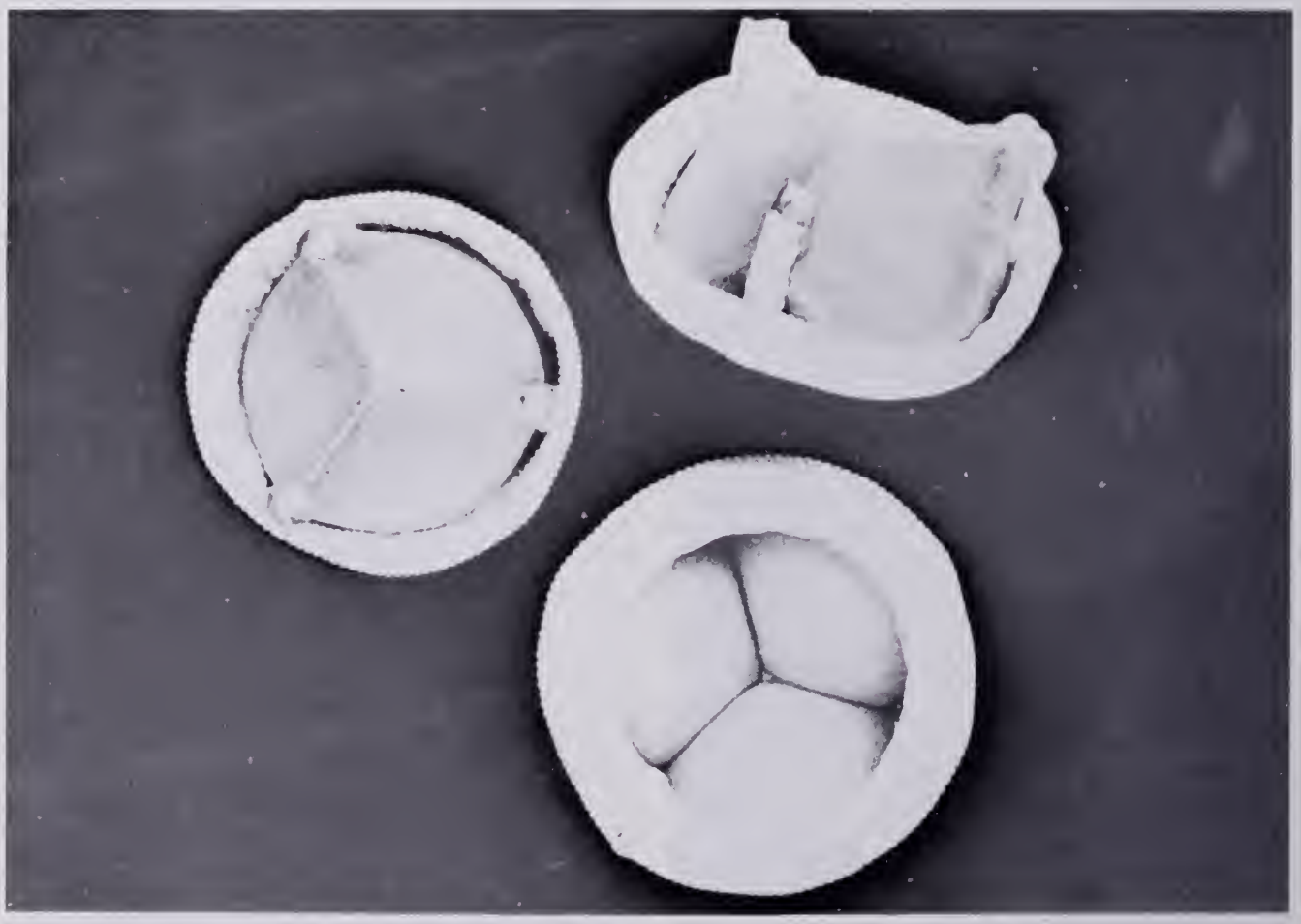

Fig. 4—Ionescu-Shiley bovine pericardial xenograft valve showing central flow design.

## Table 2

**Ionescu-Shiley Pericardial Xenograft Valve Early Clinical Follow-up Texas Heart Institute July 1978 - June 1979**

| | |
|---|---|
| Total Number of Patients | 398 |
| Total Follow-up (Mean, Maximum) | 558 Months (4.7, 10) |
| Structural Failure | 0 |
| Prosthesis Thrombosis | 0 |
| Thromboembolism | 2.1 Episodes Per 100 Patient Year Follow-up |
| Mean Peak Systolic Gradient | 7.8 mmHg |

Advantages:

- Low Embolic Rate
- Anticoagulation Not Required
- Not Hemolytic
- Excellent Hemodynamic Characteristics
- Quiet

## Table 3

**Ionescu-Shiley Pericardial Xenograft Valve Early Postoperative Results Texas Heart Institute July 1978 - June 1979**

| Procedure | Number of Patients | Early Deaths | Percentage |
|---|---|---|---|
| Aortic Valve Replacement (as an isolated procedure) | 90 | 3 | 3.3 |
| Aortic Valve Replacement (including combined procedures*) | 171 | 11 | 6.4 |
| Mitral Valve Replacement | 137 | 13 | 9.5 |

*Including: Reoperations, mitral commissurotomy, annuloplasty, coronary artery bypass procedures.

techniques of tissue preservation using gultaraldehyde fixation have resulted in the development of tissue valves which offer durability and freedom from long-term anticoagulation. Valves constructed of a porcine aortic valve mounted in a synthetic frame have been used successfully for nearly ten years.[13] However, in our opinion the most promising of the currently available prosthetic valves appears to be the Ionescu-Shiley xenograft valve which is composed of three leaflets of a glutaraldehyde fixed bovine pericardium mounted on a fabric covered titanium frame (Fig. 4). This valve provides excellent hemodynamic characteristics and does not require anticoagulation. During a recent 12-month period, more than 400 Ionescu-Shiley pericardial xenograft valves were implanted at the Texas Heart Institute. Operative mortality was 3.3 percent in the aortic position with a mean peak systolic gradient of 7.8 mm Hg and a systemic embolism rate of 2.1 episodes per 100 patient year follow-up. (Table 2 and 3)

## Guidelines for Decision Making

Current data confirm that reliable valve prostheses are now available that can be implanted with low morbidity and mortality with the expectation of excellent long-term results without long-term anticoagulation. With these facts in mind, certain recommendations can be made regarding the treatment of individual patients with cardiac valve disease.

Patients with aortic stenosis should be referred for cardiac evaluation as soon as the diagnosis is seriously suspected, even if the patient is asymptomatic. Once the systolic gradient across the aortic valve reaches 50 mm Hg, the outlook for a five-year survival is poor; and with the onset of symptoms, e.g. angina, congestive heart failure, syncope, the prognosis is even more grave and the risk of sudden death is increased.

Patients with pure aortic insufficiency follow a slower, progressively deteriorating course without the risk of sudden death. They should be evaluated as soon as they reach New York Heart Association functional class III (symptoms with less than normal exertion). The risk of both the disease and surgical therapy increases substantially once frank congestive heart failure develops and eventually reaches a point where full myocardial recovery is impossible even with corrective valve surgery. Aortic valve replacement, therefore, should be performed before severe ventricular hypertrophy or dilatation occur.

Patients with "pure" noncalcific mitral stenosis in functional class II are excellent candidates for open mitral commissurotomy which can be performed with an operative mortality of less than two percent. Their chance of surviving ten years is excellent, without further need of reoperation. Patients with calcific mitral stenosis, mitral insufficiency or a combination of stenosis and insufficiency benefit most from valve replacement when they reach functional class III, but before they develop an end-stage dilated ventricle, the function of which can never be fully recovered. In selected patients with pure mitral insufficiency without calcification, valve repair can be performed using a variety of annuloplasty techniques which have been developed during the past ten years.

## Conclusion

The advent of cardiopulmonary bypass and techniques for open heart surgical procedures heralded a new era in the treatment of cardiac valve disease. Rapid developments in, and the evolution of, cardiac valve prostheses have resulted in dependable mechanical and biologic tissue valves. The distinct advantage of biologic valves is their freedom from thromboembolic complications, thus not requiring long-term anticoagulation. Patients can undergo cardiac valve replacement today at low operative risks and expect excellent relief of symptoms, low morbidity and an increased quality and quantity of life.

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# Current Surgical Management of Left Main Coronary Occlusive Disease

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**ABSTRACT: Patients with narrowing of the left main coronary artery shown by angiography to be greater than 50 percent should undergo coronary revascularization to relieve symptoms and to increase longevity. Improved medical and surgical management of these patients has reduced the earlier perioperative mortality of 10 to 15 percent. Recent improved results have been due to aggressive medical control of both preoperative angina pectoris and hemodynamic instability prior to surgical revascularization. Patients are carefully controlled with appropriate dosages of propranolol and nitrates, and are semi-electively scheduled for surgery. Preoperative and anesthetic management includes continuous monitoring of radial artery pressures, pulmonary artery and wedge pressures, and electrocardiogram. Manipulation with administration of intravenous fluids and avoidance of myocardial ischemia with intravenous nitroprusside and propranolol has resulted in zero mortality and one single perioperative myocardial infarction in our recent experience.**

## Introduction

Occlusive lesions of the left main coronary artery carry a particularly ominous prognosis. In several reviews of the medical treatment of such lesions, mortality ranges as high as 50 percent over a two year period. [1-3] Comparisons of medical and surgical treatment for left main coronary stenosis have revealed such a decided advantage to surgical therapy in short and long term mortality that most patients with left main coronary stenosis are referred immediately for surgery.[4,5] Randomized studies specifically excluded left main coronary artery (LMCA) disease after only a brief experience because of the dramatic differences in survival with surgical instead of medical treatment.

In spite of the decided advantages of surgical treatment of this lesion, the mortality and morbidity of operating on such patients has remained high. Though the complications seen initially with coronary angiography in patients with left main coronary disease have been substantially reduced by improved technique and management of such patients, the perioperative mortality has ranged as high as 20 percent in several series.[6, 7] After the initial risk of catheterization and a relatively high incidence of preoperative morbidity were recognized, it was recommended that LMCA lesions should be bypassed on an emergency basis. It was advocated that patients found to have LMCA stenosis in the catheterization laboratory should be transferred to the operating room for immediate revascularization.[8] Recent improvements in that mortality reduction in the incidence of perioperative myocardial infarction have resulted from improved combination of medical and surgical therapy.

In recent experience with 30 revascularizations for left main coronary narrowing of greater than 50 percent, we have utilized aggressive medical stabilization prior to elective revascularization. Management with appropriate monitoring and pharmacologic manipulation has resulted in no deaths and one perioperative myocardial infarction in this group of patients.

## Risk Modification

Recent changes in details of operative technique and close attention to risk factors for the ischemic myocardium have resulted in excellent survival and low morbidity.[9] In the course of analyzing perioperative risk factors, the immediate postcatheterization and preoperative monitoring and anesthetic manipulations have been scrutinized closely. It is recommended that patients found to have LMCA stenosis at the time of cardiac catheterization should be monitored for a brief period of time after the catheterization for ischemia or hemodynamic changes. Continuous monitoring of the electrocardiogram and arterial pressure in addition to monitoring of pulmonary artery pressures in selected cases should be undertaken.

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Several suggestions have been proposed for protecting the patient with significant LMCA stenosis. Emergency revascularization has been recommended in almost every case. Exposure of the femoral vessels for early cardiopulmonary bypass prior to median sternotomy in the event of acute ischemia has been recommended with commendable results.[10] Bypassing the right coronary artery as an initial manipulation, after cardiopulmonary bypass is instituted, was also suggested. Various techniques of myocardial preservation in the intraoperative period have also resulted in generally lower incidences of perioperative myocardial infarction in all aspects of coronary artery surgery including those involving the left main coronary artery.

The major thrust of medical management in the postcatheterization and preoperative period should be toward total stabilization of all hemodynamic parameters, most especially those related to ischemia. The patient with unstable or continuing angina should be treated with bedrest, judicious use of sedative, propranolol, and vasodilators. Surgery need not be performed under suboptimal circumstances or emergency conditions if the patient is appropriately managed medically. The use of maximal beta blockade with propranolol and vasodilatation with intravenous nitrates only rarely will be inadequate in the management of the unstable patient.

Intraaortic balloon counterpulsation (IABC) then becomes the ultimate medical tool in stabilization of the patient with refractory ischemia prior to surgery.[11] It is apparent that the most dramatic improvement in survival and reduction of morbidity during revascularization in patients with LMCA stenosis has occurred with the prophylactic use of the intraaortic balloon for counterpulsation.[12-14] The value of IABC for the management of myocardial ischemia is well documented experimentally and clinically. The mechanism of increased coronary artery blood flow and concomitant reduced myocardial oxygen consumption alleviates the oxygen supply and demand imbalance and helps to stabilize the cardiovascular system. Several years ago the use of prophylactic IABC in high risk patients was recommended. Subsequent to that, many cardiac surgeons utilized IABC routinely in patients with LMCA stenosis. Dramatic results were reported and strong contrasts were made in comparisons to patients treated before the use of prophylactic IABC.

As is true with any invasive means of management, the complications of IABC cannot be ignored. Morbidity as high as 30 percent has been reported by several authors in the use of the IABC device.[15-17] Complications as severe as amputation and paralysis have been recorded, as have sepsis, aortic dissection, and lower extremity vascular insufficiency. As with most new measures of medical and surgical management, a middle ground is ultimately reached. Presently, IABC is utilized selectively in preoperative patients who are undergoing revascularization for left main coronary occlusive disease. The prophylactic use has been abandoned by these authors; IABC is reserved rather for those patients with unstable angina or preinfarction angina who cannot be managed by pharmacologic means alone.

It seems that IABC was a protective mechanism that stabilized the patient not only during the pericatheterization period but also during anesthesia induction and preparation for cardiopulmonary bypass. We now feel that the use of that device should not be a substitute or alternative for appropriate monitoring and pharmacologic or physiologic manipulation. Our experience with many patients on very large doses of propranolol has led us to feel quite safe in continuing beta blockade up until the immediate preoperative period, and we in fact frequently administer intravenous propranolol even during or immediately following the induction of anesthesia if the patient has ischemic electrocardiographic changes, hypertension, or tachycardia.

The management of these patients in the immediate preoperative period is critical. As recorded later in our experience, we have not found it necessary to submit patients to emergency revascularization for LMCA stenosis. These patients are initially managed with propranolol and nitrates and are scheduled for semielective revascularization. Light preanesthetic medication includes a narcotic and diazepam. The patients are transferred directly from the ward to the operating room whereupon continuous monitoring of the $V_5$ electrocardiogram and the radial arterial pressure is undertaken. Swan-Ganz flow directed catheters are then placed percutaneously into the pulmonary artery for measurement of pulmonary artery and occlusion (wedge) pressures. At this point the patient can be prepped, draped and prepared for cardiopulmonary bypass in an unhurried and well organized manner. During this very volatile and potentially labile period of time, the patient's hemodynamic situation is continuously monitored with electrocardiogram, filling pressures, and arterial pressures. Swings in arterial pressure are studiously avoided and fluid administration is utilized to maintain filling pressures. Afterload reduction with nitroprusside is undertaken in the event of hypertension. Intravenous propranolol is administered in doses of two to 10 milligrams for the occurrence of ischemic changes on the $V_5$ electrocardiogram or for tachycardia in excess of 70. Patients who are preoperatively prepared and stabilized with adequate doses of beta blocking agents and vasodilators (or in severe cases, with IABC) are remarkably stable throughout the period anteceding cardiopulmonary bypass.

## Present Experience

Our experience from September 1977 to February 1979 includes 30 revascularization procedures (with reversed saphenous vein segments) for left main coronary artery occlusive lesions. Two of those procedures were repeat revascularizations and two patients had total occlusion of all three major coronary vessels. Twenty patients (67%) also had lesions of 90 percent or greater in the right coronary artery. One patient with unstable angina and LMCA stenosis also underwent concomitant right carotid endarterectomy because of persistent and recurring symptoms of transient cerebral ischemia with a documented 95 percent narrowing of the right internal carotid artery. The spectrum of left ventricular function in our patients is reflected somewhat by the mean left ventricular end diastolic pressure of 18 (range six to 37), though the sometimes large doses of propranolol may have increased the left ventricular end diastolic pressure (LVEDP). Ejection fractions ranged from 20 to 80 percent with an average of 55 percent. There was no operative mortality in this group. IABC was not utilized prophylactically in any patients. One patient required IABC after his repeat revascularization (done because of graft thrombosis from the first operation). Two patients underwent endarterectomy of the left anterior descending artery (LAD) because of total occlusion and complete absence of a lumen.

Evaluation for perioperative myocardial infarction included serial electrocardiograms, serial isoenzymes, and myocardial scans in the pre and postoperative period. One patient suffered a perioperative myocardial infarction on the third postoperative day when his LAD graft thrombosed. This was subsequently documented by recatheterization, although electrocardiographic findings, enzyme changes, and a postive myocardial scan documented the occurrence of the infarction.

It is noteworthy that each of these patients underwent evaluation under routine circumstances. The patients were monitored in the pericatheterization period as noted, and were aggressively treated to stabilize angina and normalize hemodynamics. The patients were operated on within two to 90 days after catheterization (the mean interval was 30 days). Daily preoperative propranolol doses averaged 280 milligrams with a range of 80 to 800 milligrams. These large doses reflect the diligence with which relief of symptoms and stabilization were sought.

We presently feel that patients with left main coronary artery occlusive lesions greater than 50 percent on angiography should undergo aortocoronary revascularization if adequate ventricular function is reflected by an ejection fraction of 20 percent or greater. All vessels of one millimeter or larger with a proximal occlusive lesion are bypassed. Our average number of distal arterial anastomoses for these 30 patients was 3.2. It has been emphasized that even in the absence of occlusive lesions other than that isolated to the left main coronary artery, at least two bypasses should be undertaken. Better survival is well documented in those patients who had bypasses to both the circumflex system as well as the LAD system in the presence of a left main coronary artery lesion.[18]

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# Bloodless Coronary Bypass Surgery

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The widespread application of aortocoronary bypass procedures for the treatment of coronary insufficiency since 1969 has resulted in a great increase in the number of open heart operations performed in this country. An analysis of cardiac surgery performed in 88% of the hospitals in the United States that performed cardiopulmonary bypass in 1973, indicated that an average of eight units of blood were being used for each operative procedure.[1] It is now estimated that approximately 100,000 coronary bypass operations are performed annually in this country. This has placed a tremendous demand on our nation's blood banking facilities. In addition, there is significant morbidity associated with postoperative hepatitis which continues to be a problem, with 2-3 of every 100 patients undergoing cardiac surgery contracting clinical hepatitis.[2]

In an effort to significantly reduce the need for blood during coronary bypass procedures, we have recently made several modifications in our technique in order to institute a strict protocol to conserve blood, both during the operative procedure and during the postoperative period. These measures include the minaturization of perfusion equipment, marked hemodilution, reduction of cardiopulmonary bypass time, reinfusion of all blood lost during bypass and conservatism in the use of transfusions for postoperative anemia. This report will analyze 100 consecutive primary coronary bypass procedures which we performed at North Ridge General Hospital, in which we have not administered any intra-operative blood transfusions.

## Patients and Methods

One hundred consecutive coronary bypass patients were analyzed in this study. Patients who had multiple operative procedures or re-operation for coronary revascularization were omitted due to the well recognized increase in the operative requirement for blood transfusion due to adhesions and scar formation related to previous cardiac surgical procedures. The average age of our patients was 61 (ranging from 28 to 79, with 40% of the patients being older than age 65). The average number of bypasses performed was 2.3 per patient. Disposable bubble oxygenators with a total perfusion apparatus pre-cut and connected were primed with 2,500 cc's of Ringer's lactate solution. Heparin, 3 milligrams per kilogram, was administered to these patients prior to cannulation for cardiopulmonary bypass. The aortic anastomosis of the reversed saphenous veins was performed before the institution of cardiopulmonary bypass. Cardioplegic arrest was instituted using 300 cc's of cold (4°C) cardioplegic solution, containing Dextrose and one-quarter normal saline with 30 milliequivalents of Potassium Chloride and 5 cc's of Sodium Bicarbonate, injected into the aortic root before the performance of the distal coronary anastomoses. The hemoglobin, hematocrit, acid base status and oxygenation were monitored at frequent intervals during the period of bypass. At the conclusion of bypass, the Heparin was reversed with an equivalent amount of Protamine and subsequently checked using a BART Test[3] (venous whole blood ceolite-activated recalcification time). All of the blood from the cardiopulmonary bypass apparatus was returned to the patient either at the conclusion of the procedure or was placed in blood bags and reinfused in the Intensive Care Unit following surgery as permitted by the cardiac function. If spontaneous diuresis was not observed in the immediate postoperative period, diuretics were administered to maintain a urinary output greater than 50 cc's per hour during the first 24 hours. Postoperative hemoglobin and hematocrit determinations were made immediately following surgery and on the first three postoperative days. Postoperative blood transfusions were usually withheld unless the hematocrit was consistently below 25. Postoperative anemia was treated with oral iron preparations.

## Results

All of the patients survived the operation with two deaths occurring during the postoperative period for causes unrelated to the cardiac procedures. One death was a result of a dissecting aortic aneurysm, and the second patient died with a bleeding gastric ulcer and perforation with sepsis. Neither of these complications were related to any intra-operative or postoperative anemia. The blood utilization of these two postoperative deaths was omitted for this analysis in view of the fact that their need for postoperative transfusions was for problems unrelated to the cardiac surgical procedure itself. The cardiopulmonary bypass time in these 100 patients averaged 48 minutes. The average pre-operative hematocrit was 42, with the average hematocrit while on

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## Table I

| | Age (Years) | Pump Time (Minutes) | Weight (Kg) | Number of Grafts | Pre-Op Hematocrit | Intra-Op Hematocrit | Immediate Post-Op Hematocrit | One Day Post-Op Hematocrit | Chest Draining (cc) |
|---|---|---|---|---|---|---|---|---|---|
| Patients Receiving No Blood Transfusion During Hospitalization | 59 | 45 | 82 | 2 | 44 | 24 | 29 | 31 | 651 |
| Patients Receiving One Blood Transfusion | 59 | 50 | 74 | 2.2 | 41 | 22 | 28 | 29 | 706 |
| Patients Receiving Two Blood Transfusions | 63 | 46 | 69 | 2.1 | 42 | 20 | 25 | 30 | 678 |
| Patients Receiving More Than Two Blood Transfusions | 62 | 57 | 72 | 2.6 | 40 | 20 | 23 | 29 | 854 |
| TOTAL | 61 | 48 | 75 | 2.3 | 42 | 22 | 27 | 30 | 801 |

cardiopulmonary bypass falling to 22. In 30% of these patients, the hematocrit fell below 20 at some time during bypass. The average hematocrit immediately following surgery was 27 and rose to an average of 30 on the first postoperative day. None of the patients received intra-operative blood transfusions, although 51 patients required two or more transfusions in the postoperative period. Thirty eight patients received no blood throughout their hospitalization. An average number of only 1.5 units was used during the entire hospitalization of these 100 patients. There were no cerebrovascular accidents, renal failure or other complications that could be attributed to anemia. No peri-operative myocardial infarctions were observed in the series. Also, there was no evidence of an increased bleeding tendency in the postoperative period that could be attributed to the severe hemodilution at the time of operation. The average postoperative blood loss as noted by the chest tube drainage was 700 cc's. Table #I summarizes the average data from these patients with respect to their need for postoperative transfusion as related to a variety of factors such as age, weight, perfusion time, number of grafts, etc. The principle determinant in the need for postoperative transfusion, from analyzing this table, seems to be the body weight. Smaller individuals in the range of 70 kilograms required two or more postoperative transfusions as compared to those of an average weight of more than 80 kilograms who did not require blood during their entire hospitalization. In addition, there was a slightly longer average cardiopulmonary bypass time (average 57 minutes) in patients requiring more than two units of blood after surgery when compared with those requiring no blood transfusions following operation (average 45 minutes). There did not seem to be any correlation of postoperative blood requirements with age of the patients, number of grafts or chest tube drainage.

## Summary

We have attempted to develop methods and techniques for myocardial revascularization to reduce the need for blood requirements for these procedures. In this manner, we have attempted to reduce morbidity as well as decrease the strain on already over-burdened blood banking facilities in our community. In an analysis of 100 consecutive patients undergoing aortocoronary bypass in our institution, we have not used intra-operative blood and have limited postoperative transfusions to an average of 1.5 units per patient during hospitalization. We have observed no adverse effects from this conservative approach to the management of perioperative anemia. We hope in the near future throug' further refinements in our perfusion apparatus and operative technique, to completely eliminate the need for blood transfusions during the entire hospitalization for all patients who undergo myocardial revascularization.

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# Long-Term Results of Coronary Bypass Surgery

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Coronary artery disease is the largest cause of death in the United States today. A recent report from the National Health Center for Health Statistics lists approximately two million such deaths each year, and of these, over one-third are attributed to ischemic heart disease.

The immediate mortality of myocardial infarction is approximately 33%. Of the survivors, 50% will subsequently have angina pectoris and statistically the average survivor will face a ten-fold increase in the risk of left ventricular failure and a four-fold increase in the risk of sudden death, and have a four percent annual mortality. This is, without a doubt, the most serious health problem in this country today.

Coronary arteriosclerosis is not a new disease and has been demonstrated in a fifty year old Egyptian mummy of the 21st Egyptian dynasty. Calcification and thickening of the main left coronary artery was present. Mortuary scrolls also discuss sudden death in young adult males of this dynasty. Angina pectoris was clearly defined approximately two hundred years ago by William Heberden. Even before Heberden, there were accounts written of sudden death as a result of coronary arteriosclerosis by Hippocrates, Galen and Pliny the Elder. There is an especially clear account of sudden death in a fascinating chapter by Pliny in his book "Natural History", which he wrote before his own sudden death while trying to escape from Pompeii during the eruption of Vesuvius in 79 A.D. Almost certainly, these deaths were preceded by angina pectoris prior to the fatal event.

Although the original bypass procedure was performed in 1964, it was not until May of 1967 that surgeons participated in the care of patients with coronary artery disease in a meaningful way. It was at that time that Dr. Rene Favalaro applied the concept of aortocoronary bypass grafting clinically in large numbers. Since that time, there has been a striking change in the character of surgery for myocardial ischemia. The logistics for effective execution of mushrooming coronary bypass surgery and its economic impact are enormous. The obvious benefits with respect to relief of angina has stimulated interest even among those most militantly opposed to the concept of coronary artery surgery. A large vocal and often caustic group of surgeons and cardiologists have saturated the medical literature and crowded medical forums to express their views, both pro and con. Of particular interest, however, is that the gladiators of both sides are in agreement on one common point: the long term results of coronary bypass surgery are directly related to the risks of surgery and to whether or not the grafts will stay open. We cannot hope to compare mediocre surgical results on a daily basis with the natural history of coronary artery disease. Thus, a high level of surgical expertise is absolutely essential.

## The Problem in Perspective

To date, no well controlled, long term, prospective study has been reported on the natural history of optimally treated patients with angina pectoris. However, there is a wealth of data describing the relentless morbidity and mortality in coronary artery disease populations treated with varying degrees and types of medical intervention. A combination of studies from several centers indicates that if only one of the three major coronary arterial branches is involved with a significant stenosis, the annual mortality is approximately 2 to 3%. If two vessels are involved, the rate is approximately 7%, and if all three are stenosed, it is approximately 11% (Reeves, American Journal of Cardiology-1974). A review of fourteen comprehensive studies of mortality in patients with angina pectoris discloses an annual mortality for single vessel disease of from 0.7 to 3.6%, an annual mortality for double vessel

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disease of 6.6 to 13%, and an annual mortality for triple vessel disease of 9 to 15%. These studies and many others show that the annual mortality for a patient with ischemic heart disease depends on the severity and number of vessels involved, and on the degree of left ventricular impairment.

Risk factor intervention, Beta blockade, nitrate therapy and surgical intervention have been proposed as ways of relieving symptoms and possibly prolonging life in these patients, but controversy still exists concerning optimal therapy.

## The Objectives

1. Relieve angina.
2. Prevent infarction.
3. Promote longevity.

Today, even the most conservative and militant physicians originally opposed to the concept of coronary bypass surgery will agree that we now have an effective tool for treating angina pectoris in selected patients. The second point above is more controversial, less clearly defined, and remains in question. The perioperative infarction rate has been reported from 5 to 15% following coronary bypass surgery, and in our own study at Tampa General Hospital, was approximately 7.8%. However, with newer techniques to protect the heart during obligatory anoxia, there has been a significant drop in this figure. Using cold cardioplegia, Kouchouchos reported recently a 4-½% peri-operative infarction rate. The final point, and perhaps the most controversial, is promotion of longevity and the remainder of this discussion will be directed to this problem.

First, the feasibility of the operation: Clinical experience with over 21,000 selective coronary arteriograms at the Cleveland Clinic showed a significant number of patients have rather localized occlusive disease. Seventy percent of major occlusions lie within four centimeters of the coronary ostia. Fortunately, as ellucidated by Barboney in 1959, once the branches of the main coronary arteries enter the myocardium they are usually free of disease. The above reasons make surgical attack of coronary artery disease possible. The saphenous vein bypass graft needs no defense in concept. Vein grafts offer immediate restoration of more effective myocardial perfusion, and possible protection against early myocardial infarction. Immediate symptomatic improvement is striking in most patients. There is ample documentation of the feasibility of the operation and the fact that it delivers a nutrient blood supply is not debated. Again, whether the grafts will alter the natural history of coronary artery disease will depend largely upon the length of time the grafts remain open.

The known aspects of coronary artery surgery are an operative mortality in most larger series of 1 to 2%, a patency rate of 80 to 85% at one year for coronary vein bypass grafts, and up to 90% for internal mammary artery grafts. The annual attrition rate in most studies, if we exclude hospital mortality, is approximately 2.5% per year.

Factors which have been described as playing a role in influencing graft patency are low flow rates (30 to 35 cc's per minute is minimum), caliber of the recipient artery (usually arteries of 1 mm. or less are doomed to early failure), size discrepancy between donor and recipient vessel, distal run-off and the quality of the vein conduit. Additional problems are arteriosclerotic debris within the aorta, kinking of the bypass conduit, competitive flow, debris within the recipient artery and abnormalities of the vein itself.

Long term function of saphenous veins, when used as arterial conduits, has been well documented. Some of the operations performed as early as 1963 for certain congenital coronary abnormalities show functioning saphenous veins in position for over 10 years, documented angiographically. Of course, the feasibility of using this material as a conduit has been documented in peripheral vascular occlusive disease for many years. Thus, the use of veins as arterial conduits is possible and practical and revascularization surgery can be performed routinely with a low operative mortality and morbidity.

## Results

The evidence for improved long term survival after bypass surgery for advanced coronary artery disease is mounting. After a decade of experience involving more than 300,000 operative procedures, there are still few that question surgical improvement of prognosis in **selected patients** with coronary arteriosclerotic heart disease. The emphasis presently is to better identify those subsets of patients whose survival will be improved by bypass. This brief discussion will attempt to review some of the more recent data on survival following coronary bypass, with pertinent comments based on personal experience. The two most important factors which determine prognosis in coronary patients are, in order of importance, (1) ventricular function and (2) extent of atherosclerosis. Virtually all studies indicate that extensive left ventricular dysfunction is not improved by coronary bypass and results in increased operative mortality. Therefore, it is a contraindication to bypass alone unless the goal is to relieve medically refractory or severely incapacitating angina in patients who understand and accept the increased risk.

## Natural History

Table I summarizes mortality statistics as compared to extent of disease. The three studies cited were chosen because of their size, similarity of methods, and patient population, and because of completeness of long-term follow up. Although the studies by Oberman, Bruschke and Burggraf indicate a slightly higher risk for the first year after arteriography, for simplicity the average annual mortality of these studies will be expressed. Thus, patients with single, double, triple and left main disease have an annual attrition rate of 2.4, 8.2, 11.6 and 12.2 per cent. The present validity of these figures has been questioned. All these patients were originally studied before 1970, and prior to extensive use of Propranolol or widespread development of mobile emergency medical services, and before the institution of more liberal admission policies for coronary patients.

More recent studies of Hammermeister and Read involving smaller groups and summarized in Table II, appear to validate this criticism, especially in the groups with double and triple vessel disease. Annual mortality of "modern medical treatment" now appears to be 1.3, 3.6, 5.8 and 8.7 per cent for single, double, triple and left main disease, approximately a 50% decrease. The decision on which figures to utilize for comparison in the absence of randomized match groups results in the continuing controversy over the survival benefits of bypass.

## The Least Controversial Groups

The effect of coronary bypass on survival is now widely accepted in patients with left main disease and its lack of effect is also recognized in those patients with single vessel disease involving the right coronary or circumflex branch of the left main coronary.

Table III summarized the results of three studies by Read, Campeau and Farinha, on operated patients with left main disease. The average annual mortality was only 3.4 per cent. This clearly represents a better prognosis when compared to the unoperated group, and appears to have precluded any further prospective randomized studies with respect to this lesion. Although these results are impressive, this group of patients (main left disease) represents a small portion of the patient population with symptomatic coronary artery disease. It should also be emphasized that the majority of patients treated surgically had normal ventricular function or only mild left ventricular dysfunction. Those patients with severe ventricular dysfunction did not show a similar improved survival. Single vessel disease involving the right or circumflex coronary has an excellent prognosis when treated medically. To appreciate this, two of the older natural history studies by Bruschke and Burggraf are detailed for single vessel disease in Table IV. The number of patients with isolated circumflex disease is small. However, the average annual mortality of 2.7% has not been statistically improved by any surgical series. The same is true for isolated right coronary disease with an average annual mortality of 1.6 per cent.

## A More Controversial Cohort

Patients with arteriosclerotic involvement of all three major arteries have a relatively poor prognosis with an annual mortality of 6 to 12 per cent. This group has improved prognosis following bypass, provided ventricular function is normal. Table V summarizes the findings of three of the surgical series including the controversial V.A. Cooperative Study. The annual mortality for triple vessel disease was only 2.3%. Although the differences are striking, the value of bypass is still questioned by some because of the lack of large randomized prospective studies.

## The Most Controversial Cohort

The group of patients with double vessel disease presents the most difficulty in determining prognosis based on the type of therapy. Individual variation and coronary anatomy make interpretation of the term "double" virtually impossible without precise description of the location of lesions and the estimation of amount of myocardium supplied by various branches of the coronaries. This precision is lacking in most studies. Bruschke and his associates found no significant difference in mortality between the three possible combinations of lesions. This suggests that the annual mortality suggested earlier of 4 to 8% for double vessel disease should be accurate. However, Mittler and his associates describe a sub-set of patients with totally occluded right coronaries and subtotal occlusion of the left anterior descending which had a much poorer prognosis (an annual mortality of 10%). This sub-set of patients appeared to benefit prognostically from surgery. At this time, however, the prognosis for given sub-sets with double vessel disease remains undetermined.

Of interest is a recent report by Hammermeister and Associates, Fig. I (Circulation 59, 1979) from the Seattle Heart Watch, that suggests surgical therapy provides improved survival over medical therapy in patients with two vessel disease and normal ventricular function. Studied were 287 pairs of matched patients, identical in seven variables and followed for an average of 3.5 years.

TABLE I - FIVE YEAR MORTALITY OF UNOPERATED CORONARY DISEASE BEFORE 1970

| STUDY | SINGLE | | DOUBLE | | TRIPLE | | LEFT MAIN | |
|---|---|---|---|---|---|---|---|---|
| | # | DEATHS | # | DEATHS | # | DEATHS | # | DEATHS |
| OBERMAN | 46 | 6 | 50 | 34 | 52 | 43 | -- | -- |
| BRUSCHKE | 202 | 29 | 233 | 89 | 118 | 64 | 37 | 21 |
| BURGRAFF | 101 | 8 | 94 | 33 | 64 | 29 | 7 | 6 |
| TOTALS | 349 | 43 | 377 | 156 | 234 | 136 | 44 | 27 |
| % | 12 | | 41 | | 58 | | 61 | |
| % ANNUAL | 2.4 | | 8.2 | | 11.6 | | 12.2 | |

TABLE II - FOUR YEAR MORTALITY OF UNOPERATED CORONARY DISEASE SINCE 1970

| STUDY | SINGLE | | DOUBLE | | TRIPLE | | LEFT MAIN | |
|---|---|---|---|---|---|---|---|---|
| | # | DEATHS | # | DEATHS | # | DEATHS | # | DEATHS |
| HAMMERMEISTER | 162 | 10 | 105 | 17 | 52 | 9 | -- | -- |
| READ | 47 | 1 | 99 | 12 | 189 | 47 | 46 | 16 |
| TOTALS | 209 | 11 | 204 | 29 | 241 | 56 | 46 | 16 |
| % | 5.3 | | 14.2 | | 23.2 | | 34.8 | |
| % ANNUAL | 1.3 | | 3.6 | | 5.8 | | 8.7 | |

TABLE III - FIVE YEAR MORTALITY FOR OPERATED LEFT MAIN CORONARY DISEASE

| STUDY | # | DEATHS |
|---|---|---|
| READ | 90 | 9 |
| CAMPEAU | 197 | 36 |
| FARINHA | 267 | 48 |
| TOTALS | 554 | 93 |
| % | 16.8 | |
| % ANNUAL | 3.4 | |

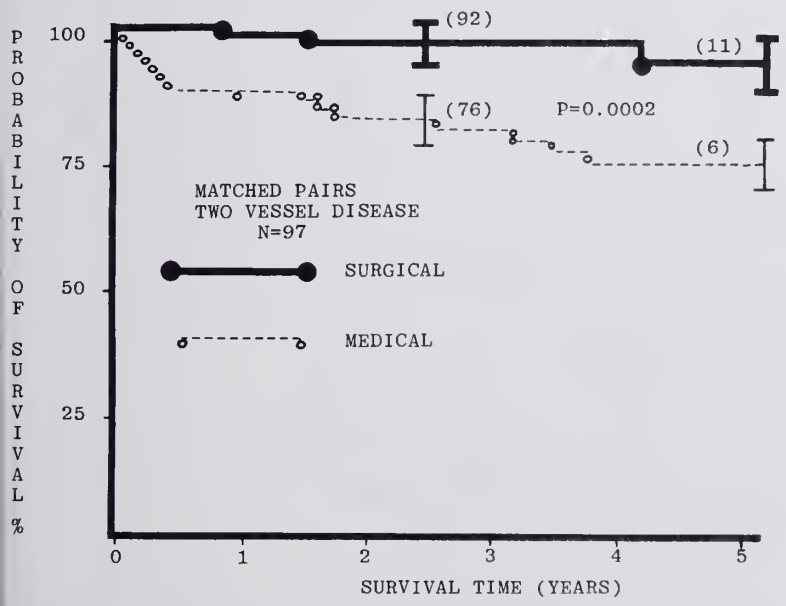
TABLE IV - FIVE YEAR MORTALITY FOR UNOPERATED SINGLE VESSEL DISEASE

| | RIGHT | | CIRCUMFLEX | | ANT. DESCENDING | |
|---|---|---|---|---|---|---|
| STUDY | # | DEATHS | # | DEATHS | # | DEATHS |
| BRUSCHKE | 98 | 11 | 27 | 4 | 77 | 15 |
| BURGRAFF | 41 | 1 | 9 | 1 | 51 | 6 |
| TOTALS | 139 | 12 | 36 | 5 | 128 | 21 |
| % | 7.9 | | 13.8 | | 16.4 | |
| | | | | | | |

TABLE V - FIVE YEAR MORTALITY (PROJECTED) FOR OPERATED DOUBLE AND TRIPLE VESSEL DISEASE.

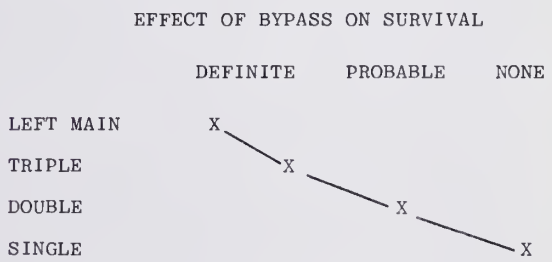
| STUDY | DOUBLE | | TRIPLE | |
|---|---|---|---|---|
| | # | DEATHS | # | DEATHS |
| READ | 101 | 20 | 166 | 25 |
| LAWRIE | 263 | 16 | 208 | 19 |
| KOUCHOUKOS | 220 | 15 | 250 | 27 |
| TOTALS | 584 | 51 | 624 | 71 |
| % | 8.7 | | 11.4 | |

FIGURE I




HAMMERMISTER, CIRC. 59, 1979

FIGURE II



## Summary

There is, at present, incontrovertible evidence that coronary bypass surgery prolongs life in certain subsets of patients with coronary artery disease. The medically treated or natural history studies performed prior to 1970 indicate an average annual mortality of 2.5, 8.3, 11.6 and 12.3 per cent for single, double, triple and left main coronary disease. More recent statistics show an annual mortality rate considerably lower of 1.3, 3.6, 5.8 and 8.7 per cent for the same groups. Following surgery, patients with left main coronary disease have an annual mortality of approximately 3.4 per cent. Most authorities now agree that this group is benefitted by operation, if extensive left ventricular dysfunction is not present. Most authorities also feel that triple vessel disease patients with normal left ventricular function also have improved survival after bypass surgery. No patient with single vessel involvement appeared to benefit prognostically from bypass surgery in general. Isolated left anterior descending disease continues to provoke some controversy despite general lack of statistical improvement. Although evidence is mounting for improved survival, double vessel disease patients have been inadequately defined thus far, and the prognostic benefit of bypass surgery remains unknown.

Future studies involving the extent of left ventricular dysfunction, in addition to coronary lesions, should provide the clinician with precise information on whom to recommend bypass with prolongation of life as a desired effect.


References are available from the author upon request.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# Management of Combined Coronary and Peripheral Vascular Disease

Paul F. Eckstein, M.D., R. Vijayanagar, M.D., Diego A. Bognolo, M.D., and P. Natarajan, M.D.

**ABSTRACT: A retrospective 4 year study identified 40 patients with combined coronary and peripheral vascular disease. It is shown that despite high risk due to advanced combined disease, a rational surgical approach will result in reduced morbidity and mortality.**

Coronary artery and peripheral vascular disease, reflecting generalized arteriosclerosis, frequently coexist. Debakey[1] found the incidence of significant coronary artery disease as high as 25% in patients with lower extremity occlusive disease. The physician treating patients with peripheral vascular problems needs to be alert for the presence of coronary disease; when both exist concurrently, a rational approach must be used. Proper management, as was first demonstrated by Bernhard,[2] will significantly reduce cardiac complications.

Conversely, patients requiring coronary bypass grafts must have careful evaluation for peripheral vascular problems, particularly carotid and lower extremity disease. Javid,[3] in a study of consecutive patients undergoing open heart procedures, found a high incidence of neurological abnormality following surgery; the most significant factor was the pre-existence of cerebral vascular disease. Patients must be carefully evaluated for a history of transient ischemic attacks, and for the presence of carotid bruits. Additionally, there must be an awareness of the vascular status of the lower extremities. Use of femoral arteries for catheter access for arteriography, in a setting of advance arteriosclerotic disease, may have tragic consequences with intimal dissection, vessel thrombosis and limb loss. For similar reasons, femoral artery cannulation for perfusion during cardiopulmonary bypass must be carefully evaluated or avoided.

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## Materials and Methods

A consecutive series was reviewed of 250 patients undergoing coronary artery bypass grafting over a 4 year period, of which 32 (16%) had combined coronary and peripheral vascular disease.

Group I included 16 patients with carotid stenosis and coronary artery disease. All had severe 3 vessel coronary involvement, 4 with left main stenosis.

Six patients presenting with both neurologic and cardiac symptoms had both coronary and cerebral arteriograms performed. Urgent cases were studied sequentially with the same catheter site. Because of the large volume of dye required, elective cases had coronary arteriograms followed by cerebral study. All were found to have severe unilateral carotid stenosis; 2 also required aortic valve replacement for aortic stenosis in addition to coronary bypass. Surgical management consisted of carotid endarterectomy followed immediately by cardiac surgery. A two surgeon approach was utilized; there was simultaneous exposure of the carotid artery while the saphenous vein was harvested. This was followed by median sternotomy, mobilization of the left internal mammary artery, and cannulation of the heart. The carotid endarterectomy was then done followed by cardiopulmonary bypass and coronary revascularization.

The remaining 10 patients in Group I with asymptomatic carotid bruits had diagnostic studies including electroencephalogram and brain scan with dynamic flow study. All were normal, and arteriography was not done. Coronary revascularization alone was the initial procedure. Precautions, including the avoidance of hypotension, were taken.

Fig. 1a

Fig. 1b

Fig. 1—Case No. I: Coronary arteriograms (A) RAO, (B) LAO demonstrating severe 3 vessel disease, (C) arch aortogram shows severe disease of left internal carotid artery.

Fig. 1c

## Case Report

Case No. I: F. O. is a 54-year-old male presenting with amarosis fugax involving the left eye. He had had episodes of dizziness felt to be transient ischemic attacks. He also had a 4 year history of chronic stable angina, an inferior wall myocardial infarction 6 months prior, and recent increasing angina despite 160mg of Inderal and nitrate therapy. Risk factors included diabetes mellitus and smoking. Cardiac cathefenation (figs. la&1b) revealed decreased left ventricular contracfilty, total occlusion of the left anterior descending and right coronary arteries with good distal reconstitution. There was stenosis of the marginal branch of the circumflex. An arch aortogram (fig. 1c) done immediately afterwards revealed significant ulceration and stenosis of the left internal carotid artery. Management consisted of a left carotid endarterectomy followed immediately with triple coronary bypasses, using the internal mammary artery to bypass the left anterior descending artery. The postoperative course was entirely uneventful. Discharge medications included Ascriptin, Persantin and Lanoxin for 3 months. At 9 months followup, the patient is free of cardiac and neurologic symptoms.

Case No. II: Group II includes 16 patients with severe peripheral and coronary artery disease. Five had abdominal aneurysms, 10 aorto-iliac occlusion or stenosis, and 1 renal vascular hypertension. All had severe 2 or 3 vessel coronary artery disease, including 4 with left main stenosis. All were managed by coronary revascularization as the first procedure followed 1 to 12 weeks later by peripheral procedures.

## Case Report

Case No. II: G.L. is a 67-year-old male found on routine examination to have a large pulsatile abdominal mass. History included 10 years of chronic but moderately disabling angina. Smoking was the only risk factor. Past surgery included partial gastrectomy for peptic ulcer disease. Cardiac catheterization (Figs. 2a & 2b) showed

Fig. 2b

Fig. 2—Case No. II: Coronary arteriograms (A) RAO, demonstrating severe disease including left main stenosis (B) occluded RCA (C) aortogram reveals aortic and iliac artery aneurysms.

Fig. 2c

minimal left ventricular dysfunction, significant stenosis of the left main artery, stenosis of the proximal left anterior descending and circumflex arteries, and total occlusion of the right coronary artery. Sonogram and aotogram (Fig. 2c) confirmed a large infrarenal aortic aneurysm extending to the right common iliac artery. Management first consisted of triple coronary bypasses. Care was taken to avoid hypertension. The recovery was uneventful, and the patient was discharged on medications including Inderal. One month later, the aneurysms were resected, and an aortoiliac bifurcation graft inserted. Recovery from the second procedure was uneventful. At 10 months followup, the patient is free of symptoms.

Group III: During the same period, 8 patients were seen with symptoms of both coronary and peripheral vascular disease. Three had had peripheral procedures alone done by other surgeons, and were referred 2 to 6 weeks later with preinfarction angina requiring coronary revascularization. Two patients refused coronary arteriography despite recommendation, and had peripheral procedures alone. The remaining 3 patients were judged, based on available clinical information including coronary arteriography in 2, able to tolerate surgery for peripheral disease without coronary revascularization. Care was taken to minimize blood loss and extremes of blood pressure. The two patients requiring lower extremity revascularization had axillo-bifemoral bypass procedures.

## Case Report

Case No. III: G.H. was a 66-year-old male admitted for coronary insufficiency. A myocardial infarction was ruled out by serial enzymes and electrocardiograms. He had a recent history of mild exertional angina and severe, incapacitating claudication. Peripheral arteriogram

revealed severe bilateral aorto-iliac disease. Cardiac catheterization was advised, but refused by the patient; he chose to have lower extremity revascularization alone. Aorto-bifemoral bypass was performed. One day later, thrombosis of the right limb of the graft occurred requiring exploration and thrombectomy. The patient improved, but 12 hours later suffered an acute myocardial infarction resulting in cardiac arrhythmias and death. Autopsy confirmed the presence of severe triple vessel coronary disease and an acute myocardial infarction.

## Results

Group I. The 6 patients who had combined carotid endarterectomy and coronary bypass suffered no stroke or myocardial infarction. Ten patients selected for coronary bypass alone suffered no strokes; however, 9 developed neurologic symptoms from 3 to 29 months later. Seven required carotid endarterectomy; all were done without cardiac or cerebral complications.

Group II. Two deaths occurred in this group. The first was in a 73-year-old man who had an uneventful course after triple coronary bypasses. Six weeks later an axillobifemoral bypass graft was done. Intractable cardiac arrhythmias occurred on the day after surgery leading to cardiac failure and death. The second death was in a debilitated 63-year-old man with congestive heart failure, peripheral emboli, and stroke, as manifestations of a large ventricular aneurysm. Coronary artery bypass and resection of the ventricular aneurysm was performed. Postoperative hypertension was not controlled by maximum medical therapy. Arteriograms and renal vein renin levels confirmed renal vascular hypertension due to occlusion of the right renal artery. An aorto-renal graft was placed. The patient died 10 days after surgery of aspiration and secondary pulmonary insufficiency. There was no further morbidity in this group.

Group III. Three deaths occurred in patients with known combined disease in whom only peripheral procedures were done. Two of the patients refused cardiac workup; severe 3 vessel coronary disease was confirmed in both at autopsy. The third patient, with a remote myocardial infarction and no anginal symptoms, was judged able to tolerate renal revascularization and resection of abdominal aortic aneurysm. The 3 patients requiring urgent coronary revascularization after peripheral procedures suffered no further complication. Two patients who had cardiac catheterization were not judged satisfactory candidates for coronary revascularization; axillobifemoral bypass grafting was done alone without cardiac complications.

## Discussion

In this series the incidence of patients identified as having both carotid and coronary disease was 5%. The frequency of patients requiring combined endarterectomy and coronary revascularization was 2%; this is similar to two recent series.[4,5] Patients in those reports also had severe 3 vessel coronary disease. Management of patients with combined disease was first discussed by Bernhard in 1972.[2] His initial group of patients approached with carotid endarterectomy as a first procedure suffered a 20% mortality due to cardiac complications. Patients subsequently managed with combined procedures had no mortality, and only 1 of 16 had a neurological deficit. Satisfactory results with this approach have been confirmed by other authors[5,6,7] Our own series confirms this technique for symptomatic carotid stenosis.

The management of asymptomatic bruits, however, is less clear. In a recent major review of carotid endarterectomy, Thompson[8] recommends arteriography in patients with asymptomatic bruits who require other forms of major surgery. In addition, during followup of patients over a 10 year period, 27% went on to develop transient ischemic attacks, and 19% completed strokes. During the shorter followup period on our own series of 10 patients, 9 became symptomatic and 7 required endarterectomy. Our approach has been to do arteriography in symptomatic patients; asymptomatic patients with normal electroencephalogram and flow studies did not have arteriography. We would continue this policy; however, the high incidence of patients going on to develop TIA's would have us, in elective circumstances, consider more frequent arteriography in patients with significant bruits or minor symptoms, and to perform combined procedures when significant carotid stenosis is present. The point should also be made that there was no cardiac complication in patients who had previous coronary revascularization and later required carotid endarterectomy.

The high incidence of coronary artery disease in patients with lower extremity arterial disease was well documented by Tomatis.[9] Of patients requiring aortoiliac revascularization, 37% had significant coronary artery disease. Among patients with abdominal aortic aneurysms, 77% were found to have significant coronary stenosis. In our series, 25% of those patients had left main stenosis. The lethal nature of coexistent disease is demonstrated by the 10% operative mortality in patients undergoing elective resection of abdominal aortic aneurysms.[10]

Several authors have described concurrent coronary artery bypass and lower extremity procudures with good results.[11,12] The urgent situation requiring a

combined coronary and lower extremity procedure has not presented in our patients. Of the 2 deaths in 16 patients, one was related to cardiac arrhythmia; the other occurred in a patient with multiple problems, and was due to aspiration and pulmonary complications. To help illustrate the benefit of proper management as shown in the previous groups, patients managed differently during the same period of time were included in group III. Three deaths occurred in this small group of 8. It was in part from the early experience with this group that the approach advocated in this paper was instituted.

In summary, 32 patients, all with severe 2 and 3 vessel coronary artery disease, including 8 with left main stenosis, and peripheral vascular lesions had either staged or combined procedures. Two patients died, 1 of cardiac etiology. There was no myocardial infarction or cardiac complications, neurologic complication or limb loss. With proper management, despite high risk with multiple sites of arterial disease, patients can tolerate coronary revascularization and peripheral vascular surgery with reduced morbidity and mortality.

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**Clarence Francis**

# Myocardial Protection During Open Heart Surgery

Michael D. Yarnoz, M.D. and Donald O. Weber, M.D.

For accurate repair of most intracardiac lesions, the surgeon requires a bloodless and quiet heart and to that end induces global ischemia (aortic cross clamping). For understanding different techniques of myocardial protection from ischemia, knowledge of this pattern of injury is necessary. Ischemia is defined as inadequate blood supply to tissues and should be differentiated from anoxia where blood supply remains, but there is a lack of circulating oxygen. Myocardium tolerates anoxia much better than ischemia, because the intact circulation removes metabolites that inhibit energy production via anaerobic metabolism. During ischemia, there is similar initial reactivation of anaerobic metabolism. However, this compensatory mechanism soon fails due to the rapid accumulation of catabolites and metabolic acidosis when circulation is not maintained.

Generally speaking, anaerobic metabolism is extremely inefficient compared to the aerobic mode, yet the survival of tissues under conditions of ischemia depends upon it. Tolerance to ischemia depends upon the following factors.[6,9]

(a) energy pool available under anaerobic conditions,

(b) energy demand of tissue measured per unit of time,

(c) efficiency of the anaerobic process.

The available anaerobic energy pool is limited by the tissue level of adenosine-triphosphate (ATP). However, through anaerobic metabolism (glycolysis) two molecules of ATP are required to obtain a molecule of glucose from glycogen. A total of four molecules of ATP are generated from the conversion of glucose to lactate; hence, the net energy produced is two molecules of ATP. This is not an adequate energy supply for maintenance of tissue function and depletion of ATP occurs, dependent on energy demand and time. When the level of ATP in tissues declines to 4u mol/Gm, it is inadequate for conversion of glucose from glucogen and the glycolytic flux (conversion of glycogen to glucose) deteriorates.[9]

## Possible Means of Myocardial Protection

If the pathophysiology of ischemia is considered, methods for minimizing its impact on the myocardium can be investigated. Reduction of energy demand can be exploited to preserve myocardium. The principle factors influencing this according to Braunwald[8] are:

(a) external heart work,

(b) internal heart work,

(c) basal metabolic requirements of the myocardial

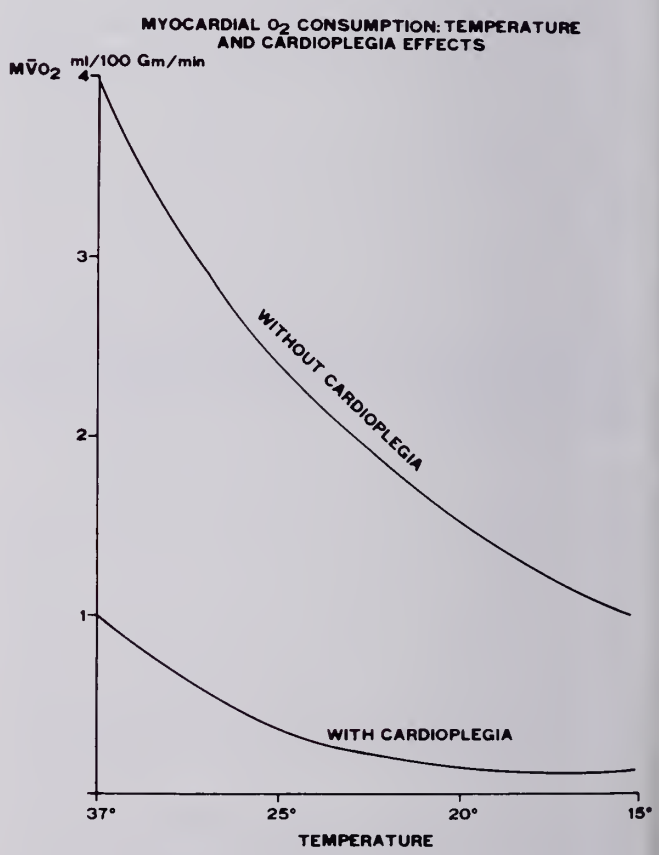


Figure 1

Myocardial oxygen consumption in the beating, working heart depends principally on tension generated in the walls of the left ventricle and heart rate (tension-time index). External heart work can be eliminated by venting the left ventricle. Under these conditions at normothermia, the empty beating heart consumes 4-5 mls of oxygen/100gms/min.

The effect of temperature on the velocity of chemical reactions is well known, halving the reaction rate for every 10°C decline in temperature. Biochemical reactions respond to the same law with a reduction of myocardial oxygen consumption with temperature (Figure I).

This response is not as uniform as in other organs, and is complicated by the fact that temperature may have a direct effect on cardiac electrical activity. At temperatures between 37°C and 33°C, the chief effect of hypothermia is reduction of heart rate. Below 33°C, however, further reduction of myocardial oxygen consumption occurs, but is unpredictable. If electrical and mechanical cardiac activity is arrested (cardioplegia), energy requirements to keep the myocardial cell alive (basal requirements) at normothermia are 1 ml/oxygen/100gms/min. Further reduction of these requirements can be obtained if hypothermia is induced (Figure 1). There is controversy about whether cardioplegia or hypothermia is the more important. Behrendt[3] observed that cardioplegia probably was more important than hypothermia in cardiac preservation, and this has been confirmed by others[11,12,15,16]. Other authors have come to the opposite conclusion[10,26]. Laks[17,18] observed better protection with cold cardioplegic solutions rather than with perfusion with cold blood, probably because fibrillation was prevented with the former. It is probably reasonable to say that effects are additive and that in combination provide optimal myocardial protection.

The third principal factor influencing myocardial tolerance to ischemia is the efficiency of the mechanism for producing energy by anaerobic means. When anaerobic metabolism is induced, tissue $po_2$ declines rapidly to 10 mmHg, at which point anaerobic metabolism is activated. The glycolytic flux (conversion of glycogen to glucose) increases 20 times that of normal, but the energy produced is not sufficient to maintain normal levels of high energy phosphates (ATP, ADP, phosphocreatine). Rapid breakdown of phosphocreatine and a small decrease in adenosine-triphosphate (ATP) are observed with the rate of utilization of these substrates related to the energy demand (Figure 2).

In addition, tissue ATP level correlates well with time required for the heart to recover function (post ischemic recovery time).[9] At tissue levels at ATP above 4u mol/gm the recovery time of the heart is very short. From 4 to 2u mols/gm, however the recovery time is slower and a level of 2u mols/gm probably represents

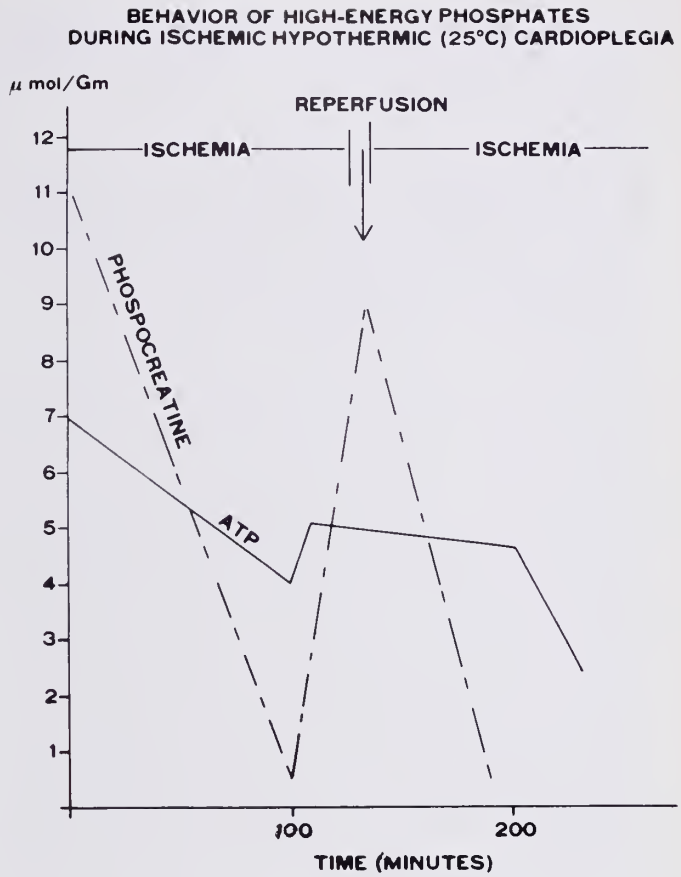


Figure 2

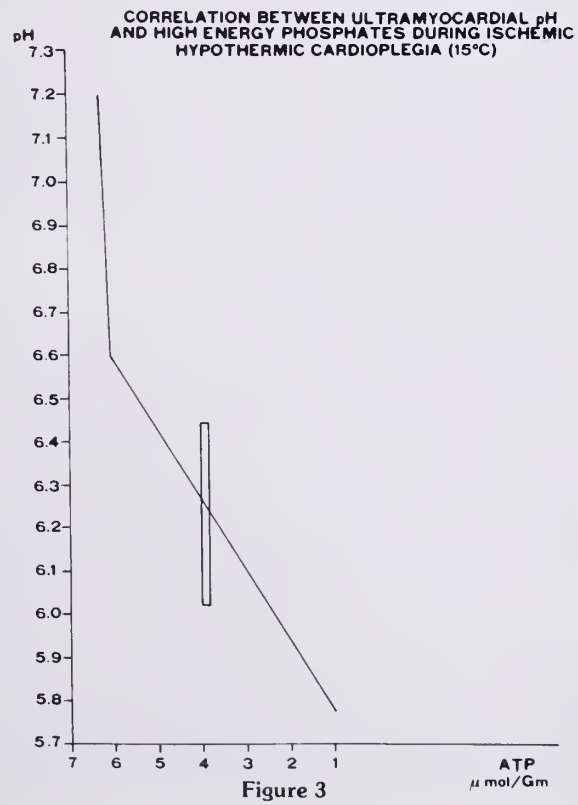


Figure 3

metabolic death of the myocardium (Figure 2). Experimental evidence suggests that the addition of ATP to cardioplegic solutions may improve tolerance to ischemia.[15]

Further limitation of anaerobic metabolism results from development of metabolic acidosis with rapid decline in ATP when pH falls below 6.6 (Figure 3). Acidosis impairs the anaerobic metabolism primarily by neutralizing 2-3 diphosphofructo-kinase, an enzyme vital to the production of lactate from glucose.

Edema is a universal post ischemic phenomenon and is defined as increased intracellular fluid. Cell membranes are so permeable to water that water concentration is the same inside as outside and uniform tonicity exists throughout intra and extra cellular fluids. Cell volume is, hence, determined by the quantity of solutes contained within. Cell membranes are also permeable to sodium. The concentration of intracellular sodium is one tenth that of extracellular fluid, because of continuous outward extrusion. This extrusion takes place against both chemical and electrical gradients and, therefore, is an energy dependent process (sodium pump) (Figure 4).

When the metabolism of tissues is inhibited by ischemia, the sodium pump is inactivated allowing a rapid accumulation of sodium ions within the cell. This reduces the intracellular anion concentration, driving chloride ions inside the cell to preserve electrical neutrality[19]. The net result is an increase in solute concentration which induces the passage of water inside the cell. This phenomenon can be reversed, if the cell is not badly damaged, by reinstitution of blood flow to the tissues. However, swelling of endothelial cells lining small capillaries prevents total restoration of blood flow to the tissues. This, the non-reflow phenomenon, makes edema one of the most important self-perpetuating factors in ischemic injury.[19]

## Myocardial Cooling

Metabolic requirements of the myocardium can be decreased by cooling. Because anaerobic metabolism is extremely inefficient and provides adequate protection for only brief periods of time, myocardial cooling should be carried out rapidly to a temperature of 10°-15°C. If cooling is not uniform and there are myocardial temperature gradients, tolerance to ischemia will be limited by the highest local temperature. Heat transfer from the body or blood produces a steady rewarming of the heart from the initially achieved temperature.[24] Considering these factors, the technique of myocardial cooling should allow for heat removal during the ischemic period. Core cooling of the heart by perfusing the coronary circulation with a solution of 5°C produces rapid (2-3 min.) and uniform cooling of the myocardium.

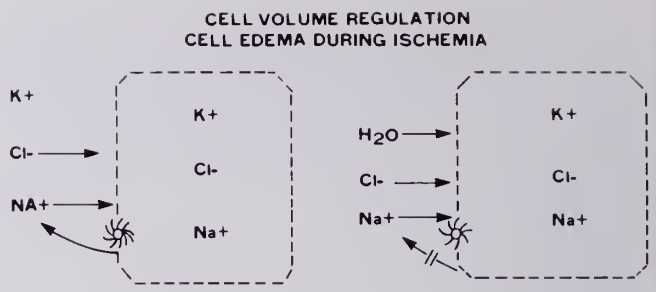


Figure 4

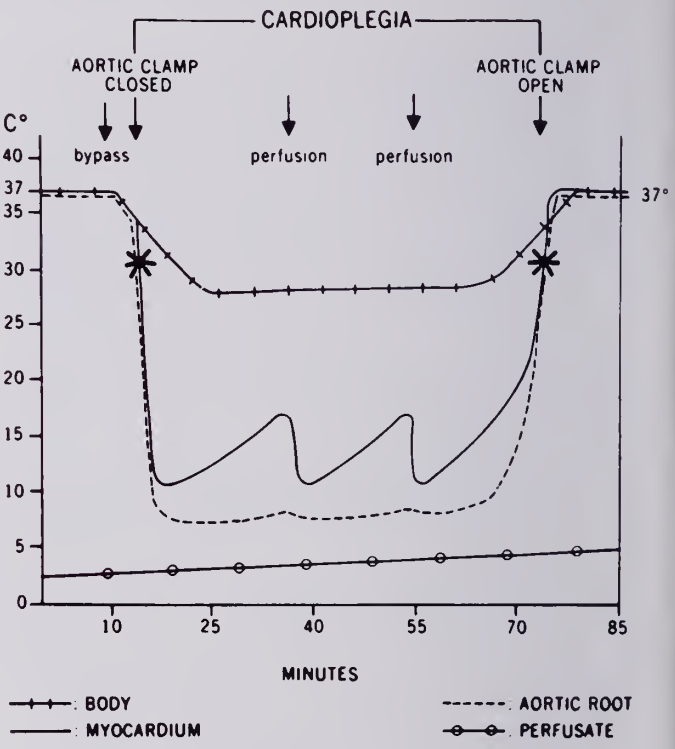


Figure 5

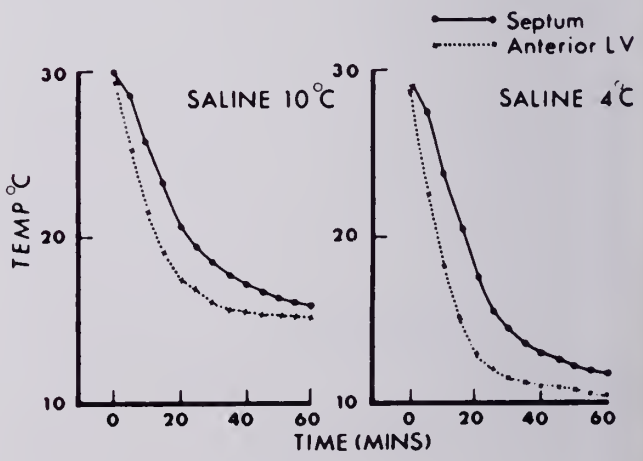


Figure 6

However, because of heat transfer, the posterior heart wall has a tendency to rewarm faster than the rest of the heart. There is also a non-uniform tendency toward rewarming. Therefore, if this technique is used alone, repeated aortic root flushings every 20-30 minutes should be done[20] (Figure 5). Another option is to combine these techniques with total body hypothermia at 30°C to minimize heat transfer.

External irrigation with 5°C saline solution was popularized by Shumway. This technique produces slow myocardial cooling (Figure 6) and induces temperature gradients, because the septum is improperly cooled. The time to achieve cooling can exceed one hour in large hypertrophied hearts. The intramyocardial gradients observed with this technique can be minimized by combining intracavitary and intrapericardial perfusion of cold saline. However, this combined technique does not offer any improvement in the rapidity of cooling.[25]

## Cardioplegia

Cardioplegia is definied as cessation of all electrical and mechanical activity of the heart. There are two basic techniques of cardioplegia:

(a) potassium chloride
(b) procainamide.

Intracoronary administration of hyperkalemic solutions increases the extracellular potassium concentration and thereby, decreases the membrane potassium gradient, producing an immediate and persistent depolarization of the cell membrane. Procaine decreases membrane permeability to sodium ions and in this way blocks membrane depolarization. Bixler[4] compared both techniques of cardioplegia and concluded that, although both are highly effective, potassium cardioplegia is slightly superior, and no further protection is afforded by their combined use. Apparently, the beneficial effect of these techniques of cardioplegia is related to the cessation of the electrical activity of the heart and is not dose dependent on the cardioplegic substance used. Furthermore, Engelman showed that high potassium concentration in the solution used may induce cardiac injury. He recommended a cardioplegic solution containing 25 mEq/L of potassium. Recently, Tucker[26] found that concentrations of potassium as low as 5 mEq/L provide similar protection as higher concentrations. The important consideration is to induce cardioplegia and closely watch the electrical activity of the heart repeating cardioplegia as necessary. The duration of cardioplegia with a single root injection is variable and depends upon the degree of coronary collateral circulation which eventually displaces the cardioplegic solution from the coronary circulation.[18]

## Protection of the Anaerobic Metabolism and Myocardial High Energy Phosphate Pool

As previously indicated, anaerobic metabolism is extremely inefficient and eventually will be unable to preserve the high energy phosphate pool of the myocardium. The ATP pool is critical for the rapid recuperation of the heart after ischemia.

Prevention of metabolic acidosis can be achieved by repeated injections of cardioplegic solution to the coronary circulation to wash out catabolites and by using alkaline pH.[20] A number of other substances have been reported as useful adjuncts. Follette[12] observed the beneficial effect of an alkaline pH on the recuperation period from ischemia. Additional protection can be provided by the addition of ATP in the perfusate.[13] Hearse[14] observed the beneficial effect of magnesium at a concentration of 15 mEq/L. However, at concentrations higher than 15 mEq/L, there was a decline in functional recovery of the heart. Glucose seems to have a protective effect on anaerobic metabolism in situations of anoxia. However, similar protection has not been proved under conditions of ischemia. Concentrations of glucose higher than 50 mOs/L appear to have a deleterious effect on the heart. According to Hearse,[15] this effect is metabolic.

## Prevention of Myocardial Edema

Cell swelling is a universal phenomenon after ischemic injury. Myocardial edema occurs even in situations of hypothermic cardioplegia (personal observation). Hyperosmolar solutions have been used for organ preservations. Powell[22] observed the beneficial effect of Mannitol in preventing post-ischemia myocardial edema and in improving post-ischemia reperfusion. However, high concentrations of Mannitol have a direct deleterious effect on recuperation of the heart, and appears to be purely of an osmotic nature.[15] Although there is a concensus about using hyperosmolar cardioplegic solutions, the osmolality of the solutions used today ranges from 290 mOs to 450 mOs. At present, we are conducting a study to determine the optimal perfusate osmolality which will prevent myocardial edema without impairing recuperation of left ventricular function.

References are available from the authors upon request.

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# Traumatic Ventricular Aneurysm: Recurrence After Surgical Repair

Daniel G. Knauf, M.D., FACS; Thomas F. Kelly Jr., M.D.; John H. Selby Jr., M.D.; Peter V. Moulder, M.D., FACS; and James A. Alexander, M.D.

Ventricular aneurysms are unusual lesions of the heart which can lead to disabling congestive heart failure, peripheral arterial embolization, and life threatening ventricular arrhythmias. The development of a ventricular aneurysm is ultimately dependent upon a noncontractile area of myocardial fibrosis and/or necrosis, most often secondary to myocardial infarction. Other etiologic factors leading to aneurysm formation include congenital, infectious, post-surgical, and post-traumatic causes.[1,2] The formation of true or false aneurysms of ventricular chambers following blunt, nonpenetrating trauma to the chest is quite rare.[3-9] Recurrent aneurysmal formation following surgical repair of a traumatic ventricular aneurysm has not been previously reported, and forms the basis for this report.

## Report of Case

A 23-year-old black male was first seen at another medical center at the age of 19 for evaluation of dyspnea, angina, and cardiac enlargement. Subsequent evaluation with cardiac catheterization revealed the presence of a large left ventricular aneurysm. There was no history of birth trauma, developmental abnormalities, limitation of activities, or endocarditis. The patient reported an episode of extensive blunt thoracic trauma suffered in a gang fight at the age of 14. An interval chest x-ray at the age of 16 revealed an enlarged heart, but no further evaluation was carried out at that time. Following the diagnosis by cardiac catheterization of a left ventricular aneurysm arising inferiorly and anteriorly from the left ventricle, the patient underwent surgical resection of the aneurysm utilizing extracorporeal circulation.

The aneurysm was described by the operating surgeon as being a false aneurysm which was extensively adherent to the pericardium and diaphragm. It consisted of multipe pockets with some containing loculated clear fluid and others, blood and thrombus. A single, two centimeter opening into the left ventricular chamber was visualized and closed with pledgeted, horizontal mattress sutures. As much of the aneurysm wall as possible was excised at that time, and the patient made an uneventful recovery from surgery.

Thirty months later this patient was seen at the Shands Teaching Hospital, University of Florida Medical Center for evaluation of intermittent chest pain and shortness of breath. Studies revealed gross cardiac enlargement on chest x-ray and the electrocardiogram showed changes of left ventricular hypertrophy with strain. Physical examination revealed a well developed, well nourished, black male in no distress. He had a blood pressure of 116/78mmHg, a weight of 151 pounds, and a pulse of 76 with no irregularity. Cardiac examination disclosed a grade II/VI to-and-fro murmur heard best at the point of maximal impulse which was in the anterior axillary line, sixth intercostal space. A frank paradoxical pulsation was easily palpable in this area. The peripheral pulses were within normal limits as was the remainder of the physical and laboratory evaluation.

Repeat cardiac catheterization demonstrated a large left ventricular aneurysm approximately twice the size of the true ventricular chamber communicating with the left ventricle at a point just posterior and inferior to the cardiac apex. No filling defects were visible within the aneurysmal sac, and slow continuous swirling of contrast material was apparent within its lumen. The left

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ventricular end diastolic pressure was mildly elevated to 15. Selective coronary angiography demonstrated normal right and circumflex coronary arteries. However, the patient had a shortened left anterior descending coronary artery which did not reach the cardiac apex. No evidence of atherosclerotic obstructive disease existed in any coronary artery; nevertheless, the diminished caliber and tapering of the left anterior descending seemed distinctly abnormal.

Subsequently, the patient underwent surgical exploration utilizing extracorporeal circulation. The findings included a large false aneurysm of the left ventricle arising from a two centimeter area near the apex and about five centimeters from the area of previous cardiac repair (Figure I). The site of previous surgical closure of the aneurysm neck was intact and this aneurysm, the walls of which were formed by the pleura, the diaphragm, and scarred myocardium, arose from an adjacent area of the left ventricular chamber. Intraventricular palpation revealed a normal left ventricular wall with no other sites of thinning or potential aneurysm formation. Closure of the ventricular chamber was carried out utilizing pledgeted, horizontal mattress sutures, and partial resection of the false aneurysm wall was accomplished without difficulty. The postoperative course was uneventful, and the patient was discharged from the hospital on the eleventh postoperative day. Ventriculography three months later demonstrated normal ventricular contour and function.

## Discussion

Post-traumatic aneurysms of the heart have been reported infrequently in the medical literature.[10] The great majority follow blunt trauma, and are often false aneurysms, suggesting traumatic rupture of the heart with containment. The lower incidence of aneurysm formation following penetrating trauma can be attributed to easier recognition of cardiac injury with this type trauma and the frequent need for immediate surgical intervention as a life saving measure. The occurrence of aneurysm formation at the site of surgical repair of

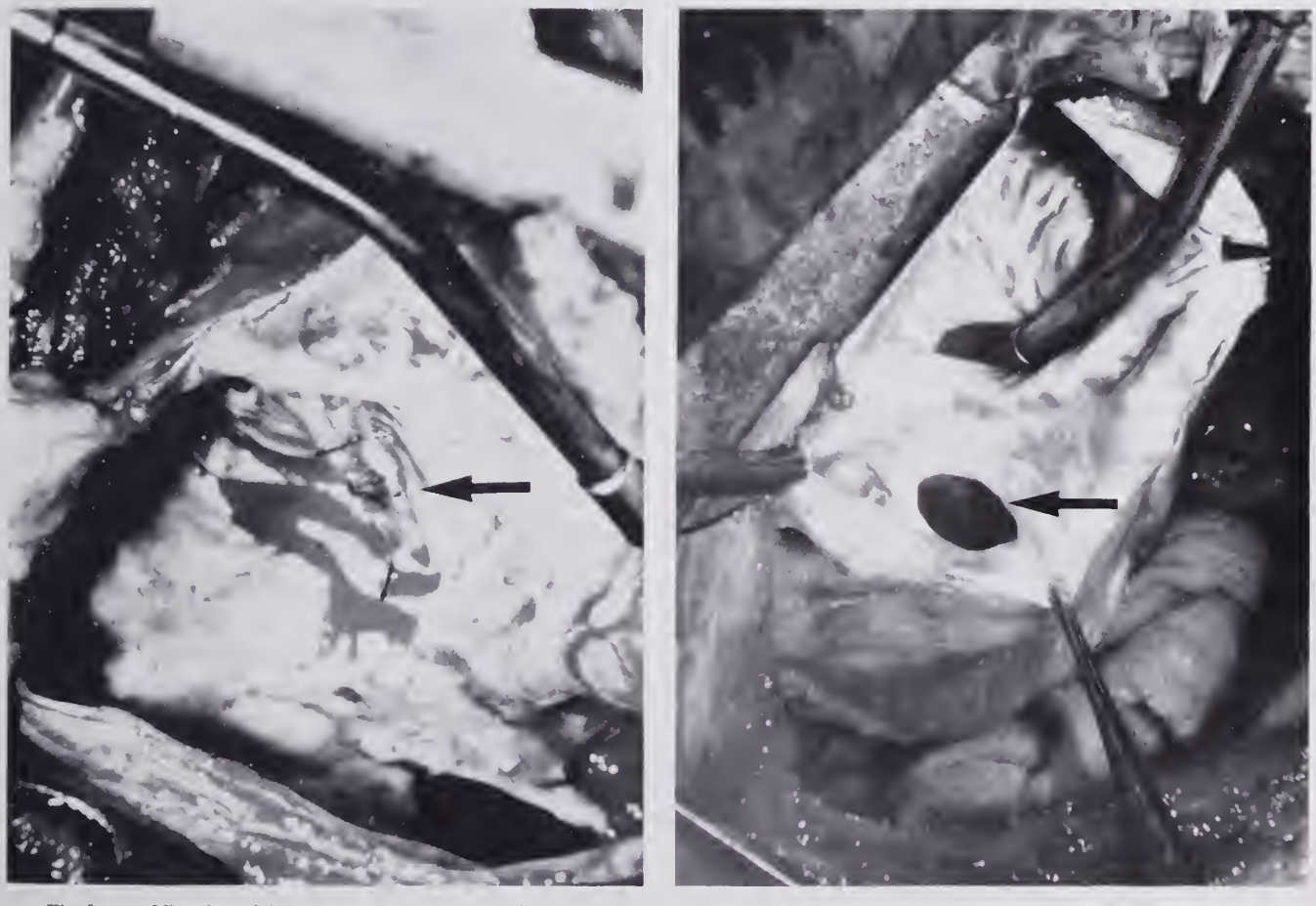

Fig. I. — a. View into false aneurysm — arrow indicates site of previous surgical repair of ventricular rupture. b. View into false aneurysm — intracardiac sucker enters LV cavity at new site of ventricular rupture. Arrow indicates loculated pocket of false aneurysm.

traumatic injuries to the heart has not been reported in the English literature to our knowledge. Most cases of post-traumatic ventricular aneurysm have been discovered through a symptomatic state and/or autopsy, most at autopsy. Complications of post-traumatic ventricular aneurysms are quite similar to those of postinfarction aneurysms and include congestive heart failure, peripheral embolization, and arrhythmias. The incidence of rupture is much higher in post-traumatic aneurysms than in postinfarction aneurysms, accounted for by the greater incidence of false aneurysms in the post-traumatic group. Surgical intervention for symptomatic post-traumatic aneurysms has been highly successful. It is noteworthy that recurrent ventricular tachycardia and fibrillation associated with a post-traumatic aneurysm have been relieved by aneurysmectomy.[11] The present report repres4ents the first recurrence of a ventricular aneurysm following initial successful surgical repair.

In the case presented there is little information as to the etiology of both aneurysms. The five year interval from the episode of extensive thoracic trauma until the presentation of a symptomatic state detracts from the ease of association for cause and effect. Of interest is the finding of cardiomegaly on an interval chest film suggesting the occurrence of the anatomical defect unaccompanied by symptoms. Few patients with post-traumatic aneurysms are asymptomatic; however, Killen[3] in a review in 1969 found five asymptomatic patients out of a group of 19 with post-traumatic left ventricular aneurysms. Because of the high incidence of symptoms associated with post infarction aneurysms, one would expect, with the passage of time, increasing cardiac enlargement and oxygen demands based on wall tension and radius interrelationships[12] The difference in degree of symptomatology is probably explained by the relative normalcy of the myocardium surrounding the contused/infarcted area in the young trauma victim as contrasted to the surrounding potentially ischemic myocardium in the older postcoronary patient. The occurrence of angina in a post-traumatic aneurysm patient with normal coronary arteriography is best explained by an imbalance between normal oxygen supply and increased oxygen demand to support the increased wall tension generated by the increased radius of the ventricular chamber. The relief of angina by aneurysm resection alone is as high as 90 percent in postinfarction aneurysms[9] and has proven to be 100 percent in the resection of post-traumatic aneurysms, most likely due to the lack of associated atherosclerotic obstructive coronary disease. Silver,[13] reported a high incidence of associated coronary disease or injury in patients with traumatic aneurysms, but of the 17 patients in his review the status of the coronary arteries was mentioned in only four. The relative youth of patients with trauma leading to aneurysm formation, the infrequency of coronary angiography in such patients, and the low overall number of lesions make evaluation of this association very difficult. Each individual patient should have coronary angiography at the time of evaluation of the aneurysm because of the availability of bypass procedures if required.[14] The recurrence of angina-like symptoms in our patient in the face of normal coronary arteries was relieved by aneurysm resection.

Though it can only be surmised, our patient most likely suffered a severe myocardial contusion secondary to blunt thoracic trauma. This contusion was possibly accompanied by injury to the left anterior descending coronary artery leading to more extensive myonecrosis in the area of the apex and lateral wall of the heart. With severe contusion and/or infarction, fibrosis and thinning, the noncontractile area became aneurysmal. Since the walls of the aneurysm were formed by extracardiac structures, it is apparent that delayed rupture of the heart must have occurred through the area of extensive contusion/necrosis. The most disconcerting fact which escapes concrete evaluation is the reason for recurrence of the aneurysm following apparent successful closure. Had the recurrent aneurysm formed at the same site of communication with the ventricular chamber as originally closed, one would suspect that the closure was inadequate and the continued wall tension relationships had created another false aneurysm through the site of surgical repair. This did not appear to be the case, however, and one is led to the possible conclusion that recurrence of this aneurysm occurred in a nearby area of extensive contusion/infarction with rupture into the previously unresected aneurysmal sac formed by the first operation. The likelihood of one patient having suffered two episodes of delayed cardiac rupture with false aneurysm formation is truly incredible.

## Management

The proper therapy for symptomatic post-traumatic aneurysms inevitably involves surgical considerations. The surgical relief of symptoms, low morbidity and mortality, and low rate of recurrence have been quite satisfying. The risk of rupture and high percentage of false aneurysms among post-traumatic aneurysms leads one to strongly consider surgical intervention in the asymptomatic patient found to have an abnormality of the cardiac silhouette. Improved techniques of extracorporeal circulation, intraoperative myocardial protection, and postoperative care suggest a steadily increasing safety to the surgical procedure. The necessary surgical procedures which may be required by the location of the aneurysm and possible involvement of coronary or valvular structures, i.e., coronary bypass or valve

replacement, are well within the armamentarium of today's cardiovascular surgeon. It is not the management of the post-traumatic aneurysm upon which concern rests, but rather the importance of early diagnosis prior to the occurrence of disabling symptoms or fatal complications. This can only be attained by greater awareness of the initial pathological leison which leads to these aneurysms—the myocardial contusion.

Myocardial contusion has been described as the most common unsuspected visceral injury responsible for death in fatally injured accident victims.[15] Previous reviews have emphasized the infrequency with which the diagnosis is made, and have led to the admonition that the diagnosis should be more frequently suspected and sought.[16-18] Serial electrocardiographic monitoring and evaluation of cardiac isoenzymes should lead to the discovery of almost all serious myocardial contusions associated with blunt trauma to the chest. These tests are easily obtained in the patient with other serious injuries; however, it is the minimally injured patient who does not require hospitalization in whom the diagnosis is unsuspected and thus often undetected. Although there is no evidence to suggest that the initial management of a myocardial contusion/infarction has any influence over the subsequent development of post-traumatic aneurysms, it can be assumed that the earlier suspicion and detection of the post-traumatic sequelae of a myocardial contusion would be in the patient's best interest. The treatment of life threatening arrhythmias, limitation of activities during the healing phase, and lessening of myocardial work has certainly limited the acute mortality associated with this leison; hopefully, chronic awareness would be similarly beneficial.

## Summary

A case of recurrent left ventricular post-traumatic aneurysm is reported. The incidence of post-traumatic aneurysm following blunt cardiac injury is low, but demanding of attention because of the high frequency of symptoms and occasional fatal presentation. Surgical intervention in the post-traumatic aneurysm is safe and accompanied by excellent results. Increased awareness of the late sequelae of myocardial contusions as well as the importance of diagnosis in the acute stage of the event is emphasized.

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**The most important product that America has been able to produce is not the automobile nor television nor the computer. It is HOPE — hope not only for ourselves but for the world.**

# Management of Aortic Dissection

Hooshang Bolooki, M.D., FRCS(C), FACS

**ABSTRACT: Since 1972, all patients admitted with an aortic dissection have been categorized according to the site intimal tear. Through 1977, 40 patients were seen; in 18 the dissection started in the ascending aorta (proximal dissection) and in 22 the tear initiated distal to the subclavian artery (distal dissection). Eight patients had chronic dissection (three proximal and five distal); all of these were operated upon electively with no operative deaths. Patients with acute dissection were prospectively assigned to surgical treatment for dissection of the proximal aorta or to medical treatment for distal dissection. Deviation from this protocol occurred in only two of 15 patients with acute proximal dissection and in three of 17 patients with distal dissection. Of 32 patients with acute dissection, 16 underwent emergency surgical repair (13 proximal and 3 distal) with three operative deaths (18%.) The remaining sixteen patients were treated with antihypertensive therapy with one death due to aortic rupture. Reasons for nonoperative intervention in patients with acute proximal dissection were patient refusal of surgery, absence of aortic insufficiency and rapid control of hypertension. In patients with acute distal dissection the indications for surgical therapy were enlarging hematoma, small true lumen of aorta or inability to control hypertension. Four of the 17 patients with distal dissection (23%), who were initially treated with drugs, had delayed repair with no operative mortality. There were two deaths on follow-up of 2-7 years. Average follow-up was 3½ years, and 34 of 40 patients (85%) were found to be alive and well. We conclude that this plan of treatment—whereby most patients with proximal aortic dissection are subjected to emergency operation and most patients with distal dissection are managed with drug therapy—lends best overall results.**

In 1958, Hirst[1] in a review of 550 patients with acute aortic dissection over a 21 year period, reported a 50% mortality at four days, 75% at two weeks and 90% after three months. The important finding in this review was that of infrequency of correct diagnosis (40%). Since 1960 the diagnosis of aortic dissection—after clinical suspicion—has been made with better than 90% accuracy although the ideal method of management of this condition is still debated. Aggressive surgeons have advocated surgical intervention in both proximal and distal aortic dissections while others have followed the recommendation of Wheat and Palmer[2] by advocating drug therapy in most patients. The purpose of this study was to implement a plan of therapy for the two types of dissection aiming for the best overall survival results.

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## Patient Material

From 1972-1977, 40 patients with a clinical diagnosis of aortic dissection confirmed by aortography were admitted to the Intensive Care Unit of Jackson Memorial Hospital. The patients' ages ranged between 49 and 79 with an average age of 63 years. There were 12 women and 28 men. The interval from the presumptive time of aortic rupture to hospital admission varied between one hour to a few weeks.

## Classification

DeBakey[3] has classified aortic dissections into Types I, II and III. Because of the importance of the site of tear in prognosis and method of approach for surgical correction we have chosen to divide aortic dissections into two groups.[4] Those in which intimal tear of the aorta originates in the ascending aorta somewhere from the aortic valve up to the innominate artery are considered as

"proximal dissection." Surgical treatment in these patients is by replacement of the ascending aorta or by direct suturing of the site of the intimal tear during the acute phase of the disease. In approximately one-third of these patients, aortic valve replacement may be required because of loss of the valve support at the annulus due to extension of dissection towards the non-coronary sinus. Pathologically, proximal dissection includes DeBakey Types I and II.

DeBakey Type III dissection involves the descending thoracic aorta distal to the subclavian artery; this is classified as "distal dissection." Mainly because of the benign nature of this lesion as compared with ascending aortic dissection and because of technical difficulties related to extensive arteriosclerosis in this region of the aorta, distal dissection is dealt with by drug therapy initially and in a few patients by surgical resection in chronic stages.

## Diagnosis

Clinically, aortic dissection was suspected on the basis of a history of hypertension or its presence at the time of admission with evidence of enlargement of the mediastinal shadow on the postero-anterior chest film (Figure 1). Twelve of the 18 patients (75%) with **proximal aortic dissection** had exquisite chest pain initiating from sub-sternal area mimicking an acute myocardial infarction with radiation towards the left arm. Additional clinical findings in this group included cardiac failure due to acute aortic regurgitation, neurological deficit, acute myocardial infarction and cardiac tamponade.

**Distal aortic dissection** in 18 of 22 patients was associated with pain in the left chest extending toward the thoracic spine. In every instance there was marked enlargement of the mediastinal shadow on the chest film (Figure 2). At the time of admission two of 22 patients with this condition had hypotension associated with a neurological deficit in the lower extremities. Both patients responded to pressor therapy with total disappearance of neurological manifestation.

In all patients, the exact site of tear was determined by aortography. Films were obtained with the catheter positioned in the ascending aorta via the femoral artery and serial films were made during aortic injection. A double lumen aortic wall shadow was seen in the ascending aorta in patients with proximal dissection (Figure 1) or in the descending thoracic aorta in patients with distal dissection (Figure 2). Noninvasive diagnostic measures such as echocardiography or radioactive flow studies were usually not utilized.

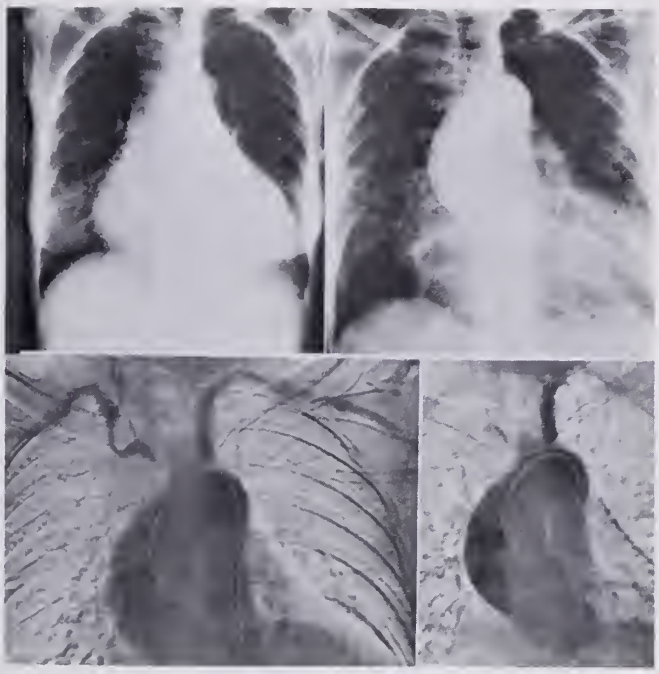

**Figure 1. — Plain postero-anterior chest film in a 68-year-old woman with proximal acute aortic dissection (left upper). Contrast aortogram (right upper) and substraction views (below) show double lumen ascending aorta with the catheter positioned in the true lumen. Note cut-off of cerebral blood vessels due to extension of dissection to the aortic arch. Intimal, tear is 3cm above the aortic valve. There is moderate aortic regurgitation. This patient had an ascending aortic graft replacement with excellent results.**

## Associated Complications

Mild renal failure as evidence by transient uremia was present in 8 of 17 patients with acute distal dissection. Eight of 15 patients with acute proximal dissection had azotemia (BUN >50mgm%). Two of eight patients with chronic dissection also had mild uremia. In three patients with acute proximal dissection severe renal failure (BUN > 150, creatimine > 2.5) was present. Two of the latter patients required hemodialysis postoperatively; both recovered completely. Evidence of cerebral ischemia was present in five patients with acute proximal dissection.

Three patients with proximal dissection had an acute inferior wall infarction. This complication was not a deterrent to surgical intervention. One other patient with proximal dissection had 500ml bloody pericardial effusion which was drained at the time of surgery. The patient did not exhibit signs of overt cardiac tamponade.

Four patients with distal dissection had mild left sided pleural effusion ( >300ml). Thoracentesis was done in one and showed the bloody nature of the fluid. Diagnostic tap was not done in others. A massive pleural

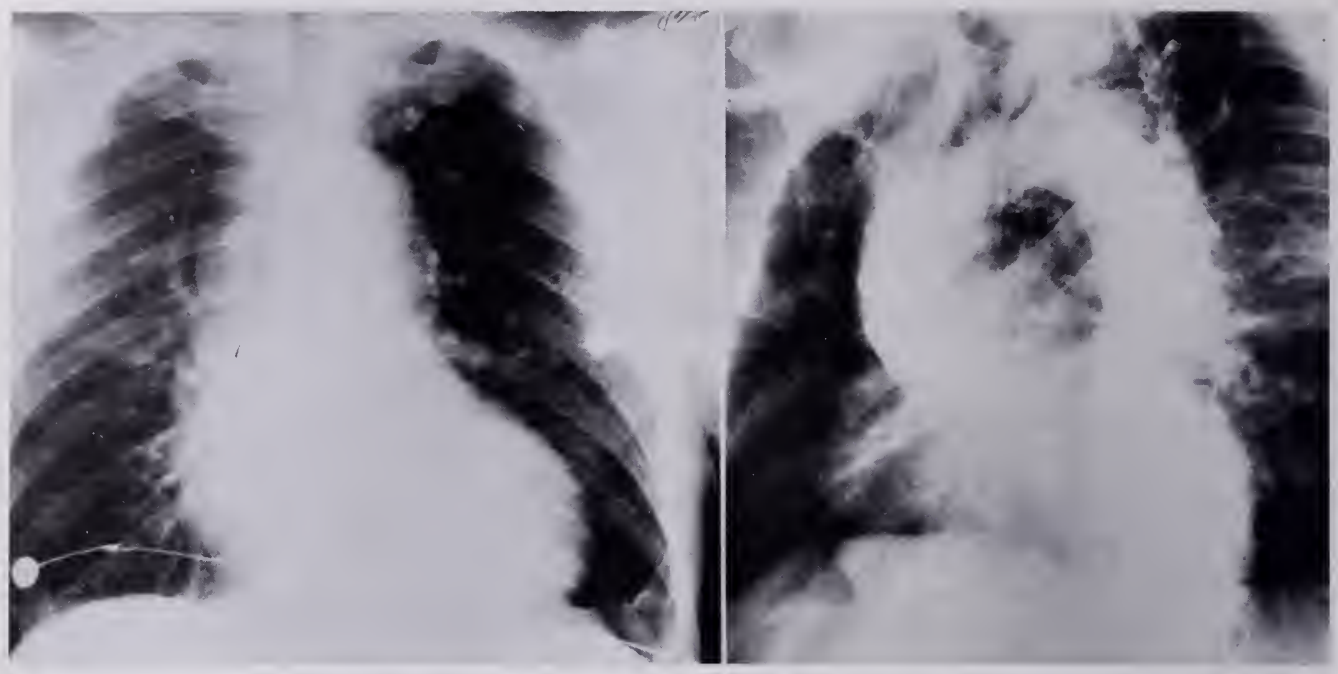

**Figure 2. — Plain postero-anterior chest film in a 62-year-old man with distal acute aortic dissection (left). Note enlarged mediastinal shadow and aortic calcification due to atherosclerosis. Contrast aortogram (right) shows intimal tear originating from distal aortic arch and left subclavian artery (which is markedly narrowed). He was treated with antihypertensive drugs and has done well for five years since dissection.**

effusion at the time of admission was the reason for rapid surgical intervention in another patient with distal dissection. Bleeding from the ruptured dissection in this patient could not be controlled at surgery.

## Plan of Treatment

Therapy differed according to time of onset of aortic dissection (chronicity) and the site of intimal tear.

Patients with aortic dissection which occurred more than 3-4 weeks prior to admission were considered chronic cases (8 patients). Depending upon the presence or absence of hypertension, such patients were treated in an intensive care unit. Surgery was performed on an elective or urgent basis after angiographic evaluation which usually was done on the day of admission.

Patients with acute aortic dissection (32) were divided into two groups according to the site of intimal tear confirmed by angiographic studies. When the intimal tear was in the ascending aorta "proximal dissection" (15), the patients were considered for surgery regardless of associated complications. If the intimal tear was in the descending thoracic aorta "distal dissection", (17), patients were considered for drug therapy despite associated complications unless aortic rupture was eminent, there was a narrow distal true lumen (<50% of aortic diameter) or blood pressure could not be decreased and pain of dissection continued after 3-4 hours of maximal antihypertensive therapy.

## Management

The initial few hours of management in all patients with acute dissection included treatment with pressor agents if the blood pressure was below 100mmHg systolic. In four patients therapy with dopamine was began in the emergency room. The period of drug infusion was no longer than two hours in each patient.

Blood pressure was maintained at an acceptable level (>120mmHg systolic). Patients with persistent hypertension were given antihypertensive therapy. Our initial drug of choice was sodium nitroprusside but because of recent controversy over efficacy of this drug on decreasing $dp/dt$[5] we have switched to trimethaphan (Arfonad) routinely unless therapy with this medication is required for more than 48 hours. Nitroprusside presently is rarely used at our institution for the primary treatment of acute aortic dissection although understandably this drug offers a more satisfactory control of blood pressure.

Usually the patients were given rapid acting antihypertensive agents (Arfonad) followed within five to six hours—in patients who were not considered for surgical treatment—with administration of methyldopa and/or propranolol.

All patients were admitted to the surgical intensive care unit for a period of 48 hours of observation unless surgical intervention was planned, in which case the patients were taken directly to the operating room while on antihypertensive therapy. While in the surgical intensive unit, all patients had monitoring of the urinary output and the cardiac output. Arterial pressure was monitored by a radial line and the rate of pressure rise (dp/dt) was measured continuously by an E for M recorder. A satisfactory level of blood pressure was achieved on the basis of adequacy of cardiac output to maintain a urinary output of more than 30cc/hour. The satisfactory blood pressure in this group ranged between 110mmHg to 140mmHg systolic. An elevation of blood urea nitrogen (BUN) was an indication of a low cardiac output requiring a decrease in the dose of antihypertensive drug. Intravenous propranolol was administered to most patients who were not operated upon; in others, with respiratory problems, this drug was not prescribed.

Disappearance of chest pain was an indication of control of dissection and control of hypertension, and dp/dt was evidence of satisfactory drug treatment. The patients were discharged home after 7-10 days of floor care and were placed on long-term therapy with methyldopa with or without propranolol. Follow-up chest x-rays were obtained at yearly intervals.

## Surgical Intervention

Thirteen of the 15 patients with acute proximal dissection underwent replacement of the ascending aorta with an appropriate Dacron tube graft. Aortic valve replacement was done in five of these patients. Four of these also had an acute inferior wall myocardial infarction due to dissection of the right coronary artery. Surgical repair of the ascending aorta, aortic valve replacement and coronary artery bypass was employed in two patients (Figure 3). Two patients with proximal aortic dissection refused surgical treatment. Both had acute dissection limited to the ascending aorta without aortic insufficiency, and blood pressure was controlled rapidly with antihypertensive therapy.

Fourteen of 17 patients with acute distal dissection qualified for long-term medical management. Three patients had to be operated upon because of one or more of the following reasons: a narrow true distal lumen of the aorta, difficulty with control of hypertension, continued chest pain and evidence of enlargement of the area of dissection (hematoma). Major vessel involvement or cut-off was seen infrequently. Surgical intervention in patients with distal aortic dissection included resection of the area of dissection and its replacement with a tube graft. In these patients the operative time was usually longer and technically the operation was more difficult because of extensive arteriosclerosis in the descending thoracic aorta and difficulty securing a satisfactory suture line.

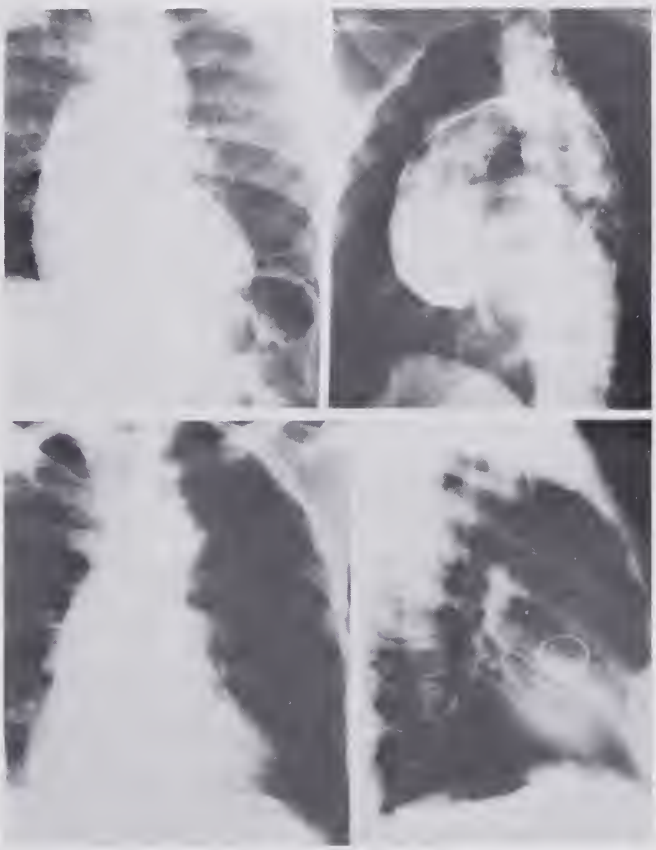

**Figure 3. — Preoperative chest film and aortogram (above) of a 52-year-old man with proximal aortic dissection and severe aortic valvular incompetence. He also suffered from severe renal failure and from an acute inferior wall infarction due to dissection of the right coronary artery. Postoperative chest films in postero-anterior and lateral views are shown below. He had ascending aorta graft and aortic valve replacement with a Carpentier-Edwards□ xenograft valve.**

## Results

Table I summarizes the results in the 40 patients. Emergency repair of the aortic dissection was done in 13 patients with proximal dissection with two deaths (15%) and in three patients with distal dissection with one death. Of 16 patients undergoing emergency repair the overall mortality was 18%.

Table I. — Results of medical and surgical treatment in acute and chronic aortic dissection. Ascending aortic dissection is termed "proximal" and descending aortic dissection "distal."

| Site of Tear | No. | Condition | No. | Emergency Repair No. | Operative Death (%) | Medical Therapy | Death | Delayed Repair | Death | Late Death No. |
|---|---|---|---|---|---|---|---|---|---|---|
| Proximal | 18 | Acute | 15 | 13 | 2* (15%) | 2 | 0 | – | – | 2** |
| | | Chronic | 3 | – | – – | – | – | 3 | 0 | 0 |
| Distal | 22 | Acute | 17 | 3 | 1 | 14 | 1 | 4 | 0 | 0 |
| | | Chronic | 5 | – | – | – | – | 5 | 0 | 0 |
| Total | 40 | | 40 | 16 | 3 (18%) | 16 | 1 (6%) | 12 | 0 | 2 |

Y Four patients had aortic valve replacement and ascending aortic graft
*One patient died due to bleeding, another three weeks later due to mesentric thrombosis
**One patient died three months later due to stroke, another four and one-half years later due to Marfan syndrome.

Three patients with proximal aortic dissection had an acute inferior wall myocardial infarction due to dissection of the right coronary artery. Two other patients had retrograde dissection of the ascending aorta into the non-coronary sinus. In four of these patients aortic valve replacement with implantation of the right and or left coronary artery (in two patients) was associated with excellent results. Sixteen patients were treated medically with one death. Death occurred very rapidly in a patient who had sudden rupture of the descending thoracic aorta a few minutes after angiography; he was being treated with sodium nitroprusside.

Among patients with proximal dissection there were three with chronic aortic dissection. All were operated upon on an elective basis successfully. In one of these patients the ascending aorta was extremely large with the hematoma extending into the right chest.

The two operative deaths in patients with proximal dissection occurred in patients who were admitted with a completed stroke due to dissection of the innominate artery. One of these died due to bleeding; the other died three weeks later due to mesentric artery thrombosis possibly due to extension of dissection. A third death occurred in a surgical survivor with proximal dissection three months postoperatively due to stroke and pneumonia. This patient also was operated upon after a cerebro-vascular accident. A fourth patient died four and one-half years after valve replacement and grafting of the ascending aorta. This was the only patient in the series who had proved Marfan syndrome. It is noteworthy that cardiac catheterization studies approximately a year and a half postoperatively failed to show any evidence of healing of the intimal dissection in the distal aorta.

Among the 18 patients with proximal aortic dissection (3 chronic, 15 acute) five patients had neurological deficits prior to hospitalization; two patients died early postoperatively and one three months later. Two patients with a mild hemiparesis at the time of the operation recovered from surgery without any neurological deficits.

There were 22 patients with distal aortic dissection. Of 17 patients with acute dissection, three required emergency surgical intervention. In 14 patients long-term medical treatment was employed with one death. There were four patients among this group who required delayed repair of their distal dissection from three months to one year after the onset. Operation was done because of increasing size of the false aneurysm in the descending thoracic aorta. Nine patients with descending aortic dissection were operated upon on a chronic basis with no operative deaths.

## Follow-up

Follow-up was complete for the 34 surviving patients. The average length of follow-up was three and one-half years. The overall three year survival among this group of 40 patients was 85% (34/40 patients).

## Discussion

Up to a decade ago the operative results for patients with acute aortic dissection were unfavorable with operative mortalities ranging from 64 to 100%.[6,7] Although the initiation of medical management in patients with acute distal dissection was associated with an impressive improvement in survival results (84% in one year),[8] recent reports indicate that in patients with acute proximal dissection emergency surgical repair can

produce similar or better results.[9,10] The problem with descending aortic dissection is somewhat different technically because of the presence of extensive arteriosclerosis in the descending thoracic aorta precluding a satisfactory technical repair. Furthermore, in these patients, dissection is not accompanied with lethal complications such as aortic insufficiency, myocardial infarction, stroke or tamponade. Therefore, medical management seems justifiable especially in view of satisfactory control of dissection and hypertension. For these reasons we elected in 1972 to implement a protocol of surgical intervention for patients with proximal dissection and medical treatment for patients with distal aortic dissection. Our experience indicates that it is possible to achieve an overall 85% survival rate at three years with this method of management. Long-term (3 year) survival results for proximal dissection in our experience is 77% (14/18) and for distal dissection 91% (20/22).

The excellent results obtained with antihypertensive therapy in this series (6% mortality) are mainly due to patient selection and judicious use of rapidly acting drugs along with continuous hemodynamic monitoring. The results with this method of therapy, therefore, should not be construed as a superior approach over surgical treatment. Our present method of management of these patients involves stabilization for the first few hours after admission followed by angiography and surgical intervention in all patients with acute ascending aortic dissection in spite of an acute myocardial infarction, severe aortic regurgitation, cardiac or renal failure. The only group in whom we are somewhat hesitant in advocating surgical repair are patients who have an acute stroke unless there is evidence of recovery from this complication with antihypertensive therapy. By far the highest mortality has occurred in this group of patients and it seems impossible that modifications in therapy may improve the results.

In patients with descending aortic dissection the decision regarding surgical intervention or medical therapy is made immediately after angiography. If the distal true lumen of the aorta is not decreased by more than 50% from the width of the proximal aorta, the patient most likely can be treated with drug therapy. Control of hypertension and elimination of chest pain with drug therapy are indications that the patient can be managed medically without surgical intervention. In addition, the size of the thoracic hematoma should be judged on the basis of plain chest films at regular intervals. Once dissection has been controlled, these patients can be discharged on long-term antihypertensive drugs and followed closely. In patients with distal dissection who, in spite of control of blood pressure, continue to experience pain or evidence of increasing size of the false aneurysm or pressure over the adjacent structures (recurrent nerve palsy, superior vena cava syndrome), elective surgical repair should be undertaken with excellent results.

Selection of the initial drug for management of hypertension should not be a difficult one. Because of our experience in one patient who ruptured an acute distal dissection while on sodium nitroprusside therapy, we studied the effects of this drug on the rate of pressure rise (dp/dt) in the laboratory and on a small group of patients. Clearly one-half of the patients, while on nitroprusside showed an increase or no change in dp/dt in spite of a decrease in systolic pressure. By alternating therapy with nitroprusside and trimethaphan it became obvious that the latter drug never had an inotropic effect and did not increase dp/dt in the patients studied. For this reason we have changed our policy in using nitroprusside as the primary drug in patients with aortic dissection and have only selectively utilized it in a few patients who showed tachyphlaxis to trimethaphan and required antihypertensive therapy for longer than 48 hours.

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**Good supervision is the art of getting average people to do superior work.**

# Noninvasive Diagnostic Techniques In Peripheral Vascular Disease

Harold R. Gertner Jr., M.D., F.A.C.S.

A great deal of interest has recently developed in noninvasive techniques for the evaluation of peripheral vascular disease. Dopplers and plethysmographs in various forms are very helpful in the evaluation of peripheral arterial obstructive disease and in the diagnosis of deep venous thrombosis. Many hospitals have combined the various techniques and have formed Vascular Diagnostic Laboratories.

These techniques, designed to supplement present diagnostic procedures, are laboratory tests and should be used as such. A careful and complete history and physical examination performed by a skilled and experienced clinician is still the single most important "noninvasive" diagnostic technique available to patients.

## Basic Equipment

**Doppler-**The doppler is an ultrasonic instrument which is designed to detect blood flow in arteries and veins. Sound waves are emitted by the doppler and when they strike solid structures they bounce back to a receiving crystal. If the sound waves hit a moving object (a red blood cell), the wave length is changed slightly; the equipment is designed to amplify this change so that it can be heard and recorded. The frequency change is proportional to the velocity of the red blood cell it strikes. Because of the velocity difference, arterial flow can easily be differentiated from venous flow. Obstructed arterial flow can also be detected because of abnormal flow characteristics. Directional dopplers are available which will not only detect blood flow, but will also demonstrate the direction of flow.

**Plethysmograph-**A plethysmograph measures and records changes in volume. In the vascular lab, the plethysmographic apparatus is usually used to record arterial pulsation in an extremity, arterial pulsations in the eye and changes in the calf size with venous filling.

## Evaluation of Arterial Disease in the Legs

**Doppler Ankle Pressure-**The procedure can be easily performed in the office or at the bedside and should be a routine part of the examination of suspected arterial disease in the lower extremities. Doppler ankle pressure alone can give one almost as much information as a sophisticated vascular laboratory.

To measure ankle pressures a standard blood pressure cuff is placed around the leg just above the ankle. The doppler is then positioned over the posterior tibial or anterior tibial artery, and flow is monitored. The blood pressure cuff is inflated above systolic pressure and flow stops. The cuff pressure is gradually decreased, and when flow is again detected, the systolic ankle pressure is recorded. One then measures the brachial blood pressure by this same technique in both arms.

Because of variations in systolic blood pressure, it is useful to express the ankle and brachial pressure as an ankle/brachial (A/B) ratio. In the normal situation the ankle pressure should be equal to or slightly higher than the brachial pressure, and the A/B ratio will be equal to or greater than 1. Carter[1] has compared the A/B ratio with arteriograms of 202 extremities. He found that an A/B ratio of less than 0.97 could be considered as abnormal. Criteria have been developed so that patients can be placed in different clinical groups according to their pressure ratios. (Fig. 1). Objective information is, therefore, obtained to substantiate a clinical impression of arterial disease without the use of arteriography. Segmental leg pressures may be taken at the thigh, calf and ankle levels; pressure differentials at the various levels are helpful in localizing the level of obstruction.

**Doppler Wave Form Analysis-**Doppler sounds may be recorded and, analysis of these wave forms is useful in localizing an area of obstruction and the determination of its severity. This test is most useful in

COMPARISON OF ANKLE/BRACHIAL RATIO
WITH CLINICAL SITUATION

| A/B RATIO | |
|---|---|
| 1 OR GREATER | NORMAL |
| < 0.6 | CLAUDICATION LIKELY |
| < 0.25 | REST PAIN LIKELY |

J.S.T. YAO
ARCH. OF SURG. 106: 600, 1973

FIG. 1

patients with combined aortoiliac and femoral artery obstructive disease. By recording arterial sounds over the groin, one is able to make a determination as to the severity of the iliac disease.[2]

**Plethysmograph Recordings-**If a pneumatic cuff, filled to a standard pressure and volume, is applied to an extremity, the volume change with each arterial pulsation can be reproducably recorded. The wave form produced has been shown experimentally to reflect accurately the arterial pressure wave recorded by a needle inserted in the artery at that level; Raines[3] refers to these as pulse volume recordings (PVRs).

In the vascular lab, segmental PVRs are obtained from the same leg cuffs which have been used to record doppler pressures. The PVRs are used to supplement the information obtained with doppler pressures. Figure 2 demonstrates these combined techniques in a normal and abnormal leg. An occasional patient will have arteries so sclerotic that they cannot be compressed with a blood pressure cuff; consequently, accurate doppler pressures cannot be obtained. In this situation, the PVRs are extremely helpful in evaluating extremity blood flow.

**Exercise Testing-**After various measurements are made at rest, the patient is walked on a treadmill until either symptoms develop or for a five minute period. Measurements are then quickly repeated. In patients with symptomatic arterial occlusive disease the doppler pressures will drop, and the doppler wave forms and the pulse volume recordings will flatten.[4,5] If these changes do not occur, it is unlikely that the patient's symptoms are due to arterial insufficiency.

This technique adds a functional aspect to the evaluation of intermittent claudication that other forms of evaluation, e.g. arteriograms, do not give. Also, one is able to see how far the patient can walk before becoming symptomatic.

**Healing of Skin Ulceration-**Vascular lab information is useful in determining whether skin ulceration or minor amputation sites of the foot will heal. If the doppler ankle pressure is less than 40 mm Hg, it is unlikely that a lesion will heal according to Barnes.[6]

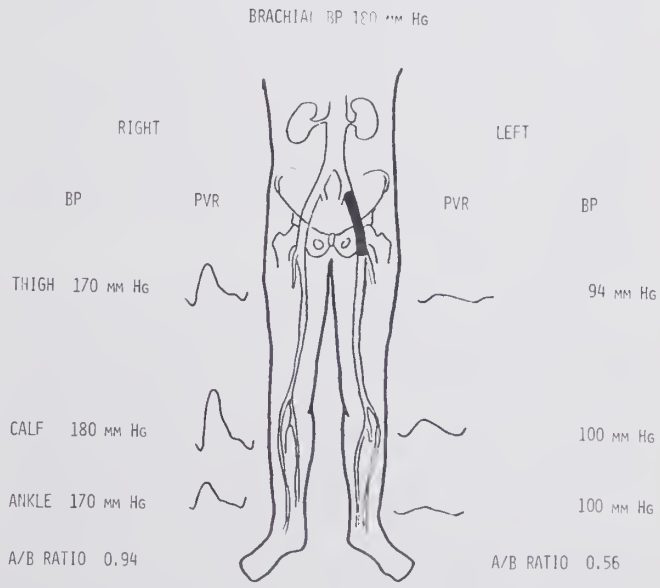
Raines[7] has shown that if the ankle pressure is less than 55 mm Hg in non-diabetics or less than 80 mm Hg in diabetics with poor pulse volume recordings, it is unlikely that healing will occur.

**Determination of Amputation Site-**Dean et al[8] have shown that in 31 major leg amputations for ischemia, the presence of a distal thigh pressure of 50 mm Hg or greater, resulted in healing of a below-the-knee amputation in 91% of cases.

**Other Examinations-**Noninvasive testing may be useful in evaluation of vasospastic disease, entrapment syndromes, thoracic outlet syndrome, impotence, graft failure and response to sympathectomy.[9]

## Evaluation of Carotid Artery Disease

**Periorbital Doppler Studies.-**The directional doppler is very useful in evaluating extracranial arterial circulation.[10] The normal carotid circulation proceeds via the internal carotid to the ophthalmic artery which gives off the retinal artery and terminates in the supraorbital and frontal arteries. The latter arteries anastomose with




THERE IS TOTAL OCCLUSION OF THE LEFT ILIAC ARTERY. NOTE THE BP AND PVR CHANGES AS COMPARED TO THE NORMAL RIGHT SIDE.

FIG. 2

branches of the temporal artery and supply blood to the skin of the forehead (Fig. 3). When these vessels are examined with the directional doppler, the flow is antegrade from the orbit to the forehead. If there is a hemodynamically significant stenosis or occlusion in the internal carotid, this condition decreases the pressure in the ophthalmic artery, and reverses the flow in the supraobital and/or frontal arteries (Fig. 4). This abnormal flow is detected with the directional doppler. By compression of various branches of the external carotid, the accuracy of this technique may be increased to high as 80-90% in detecting a stenosis greater than 70%.[10,11]

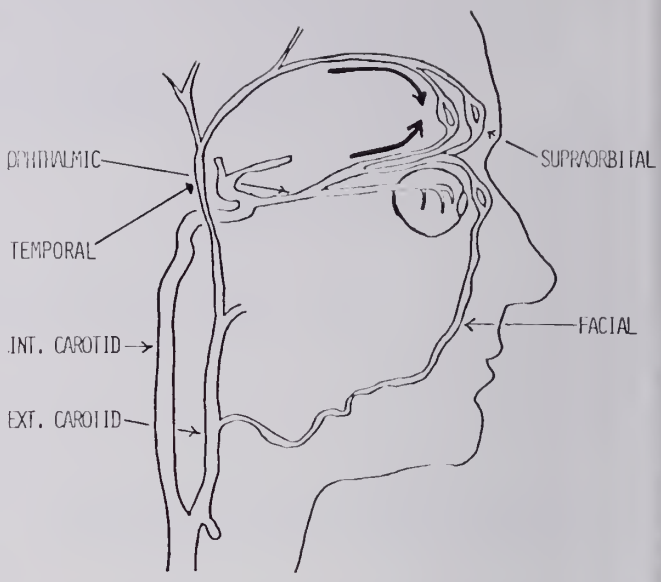
**Oculoplethysmography**-In this diagnostic technique a small suction cup is placed on the sclera of the eye, and a transducer records the retinal artery pulsations. There are two basic techniques in use.

In the Gee technique the intraocular pressure increases as the vacuum cup deforms the sclera, and results in a positive pressure of 110 mm Hg within the eye.[12] If the retinal artery pressure is less than this, there will be no pulsation recorded. The pressure is then lowered until pulsations are recorded, and at this point, the retinal artery pressure is measured. In the normal situation the pressure in the two eyes will be the same. If stenosis or occlusion of the internal carotid artery is present, the retinal artery pressure will be diminished on the same side as the lesion. One obvious difficulty with this technique is that hypertensive patients may have abnormalities which cannot be recorded because the pressures are greater than 110 mm Hg. Gee[13] reports an accuracy level of 95% in demonstrating hemodynamically significant lesions of the internal carotid artery although others[14] have not reported this level of success.

In the Karchner technique the pulse waves in both eyes and in the ear lobe are measured simultaneously.[15] If there is a carotid obstruction, the pulse arrival time will be delayed on the abnormal side. The ear lobe arrival time is taken as the standard. The accuracy of this method in the diagnosis of carotid stenosis of greater than 50% is reported to be 90%.[14,15]

**Carotid Phonoangiography**-In this procedure recording of a carotid bruit is made at three levels in the neck. This is helpful in determining whether the bruit is actually of carotid origin. When the stenosis of the carotid approaches 50-60%, the bruit will extend throughout systole. At a greater than 70% stenosis, the bruit usually obliterates the second sound and extends into diastole. When compared with carotid arteriography, the accuracy of this technique has been shown to be 86%.[16]

These tests are useful in screening patients with asymptomatic bruits, atypical neurologic symptoms and in patients at high risk for carotid artery disease. The




NORMAL INTERNAL CAROTID ARTERY CIRCULATION

Fig. 3

studies do not diagnose ulcerated plaques or moderate degrees of stenosis. Symptomatic patients should, therefore, be evaluated by arteriography.

When the techniques of periorbital doppler studies, oculoplethysmography and carotid phonoangiography are used in combination, the accuracy in diagnosis of hemodynamically significant stenosis of the internal carotid artery, is excellent even in the asymptomatic patient.[16,17]

## Noninvasive Images of the Carotid Bifurcation

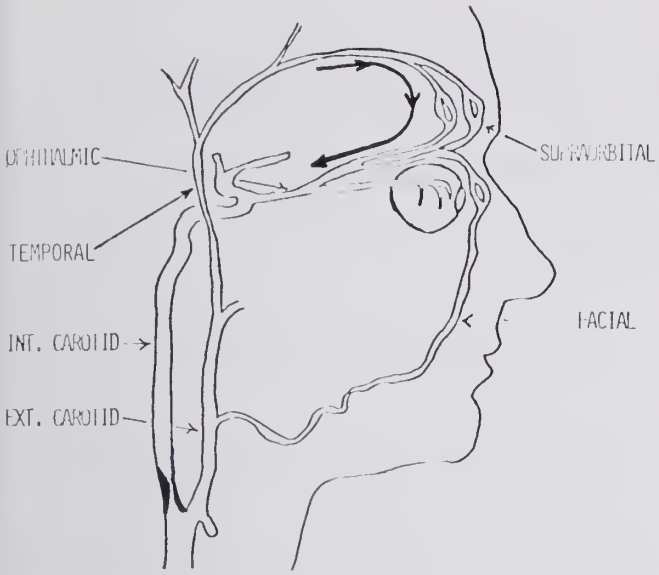
**Doppler Arteriograms**-The pulsed doppler can be used to record a graphic image of the blood flowing within the carotid artery. In screening patients with symptomatic carotid bruits this technique has proved to be helpful. It can demonstrate tight stenosis and total internal carotid occlusion.[18]

**Real Time Ultrasound**-This technique demonstrates the carotid lumen as an echo-free area and demonstrates plaques as echogenic structure. Accuracy in demonstrating plaques is quite high.[19]

There are now prototype instruments which combine both of the above principles. The clinical value of such instruments has not yet been established.

## Noninvasive Techniques in Deep Venous Thrombosis

There is a great need for an inexpensive, accurate, reproducible and noninvasive method of making the




STENOSIS OF INTERNAL CAROTID ARTERY WITH REVERSAL OF FLOW IN THE SUPRAORBITAL ARTERY.

FIG. 4

diagnosis of deep venous thrombosis. In the vascular lab the combination of the doppler and plethsymograph approach is ideal.

**Doppler Technique**-The doppler is used to evaluate the venous flow at several different levels of the leg.[20] With the doppler, one can tell if the vein is patent and whether normal respiratory variation in flow is present. If the vein is occluded proximally, one will not hear respiratory variation; instead, one will hear no flow or will hear the continous flow of collateral venous circulation.

Another doppler technique involves detection of augmentation in blood flow. If one listens over the femoral vein and compresses the calf of a normal leg, there will be a sudden increase of flow in the femoral vein. If there is a venous obstruction between the point of compression and the groin, there will be no augmentation of flow. Different methods of venous augmentation are evaluated at various levels in the leg. A literature survey revealed the diagnostic accuracy of this technique to be 87%.[21]

**Plethysmograph**-To detect deep venous thrombosis maximum venous outflow (MVO) is determined. When there is major proximal venous obstruction, blood must leave the leg via collateral venous channels. This is reflected in a slowing of the MVO rate.

The MVO is determined by placing a plethysmograph (pneumatic or impedance) around the calf. A blood pressure cuff is placed around the thigh and inflated to 50 mm Hg; this blocks the venous return, and causes an increase in the size of the calf which is recorded by the plethysmograph. The occluding cuff is then removed and blood flows out of the leg resulting in a return of the calf to baseline size. The rate at which this change occurs is used to calculate MVO (Fig. 5).

The accuracy of this test has been reported to be between 70 and 100% for deep venous thrombosis above the knee.

Most vascular labs combine the doppler venous studies and determination of MVO for evaluation of possible deep venous thrombosis. The accuracy of the combined procudures is approximately 90%.[9]

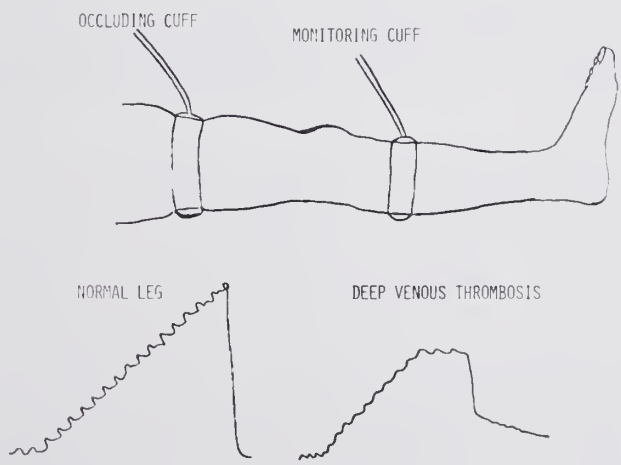
**Summary**-In evaluating peripheral vascular disease, a variety of noninvasive diagnostic techniques are available for general use.

Segmental doppler pressures combined with plethysmographic recordings and post exercise studies are used to diagnose arterial insufficiency of the legs. They may also be helpful in predicting whether foot lesions and amputations will heal.

Periorbital doppler studies, carotid phonoangiography and oculoplethysmography used in combination can be as high as 90% accurate in the diagnosis of hemodynamically significant stenosis of the internal carotid artery.

Deep venous thrombosis of the legs can be diagnosed with a 90% accuracy rate using a combination of doppler and plethysmographic techniques.

FIG. 5 DIAGNOSIS OF DEEP VENOUS THROMBOSIS




WHEN THE OCCLUDING CUFF IS INFLATED THE PLETHYSMOGRAPH RECORDS INCREASING SIZE OF THE CALF VIA THE MONITORING CUFF. WHEN THE OCCLUDING CUFF IS RELEASED, THE MAXIMUM VENOUS OUTFLOW (MVO) IS DEMONSTRATED BY THE RAPIDITY WITH WHICH THE CALF SIZE RETURNS TO NORMAL. NOTE THAT IN THE ABNORMAL LEG THE RECORDING DOES NOT RISE AS HIGH AND THE RETURN TO RESTING LEVEL IS AT A MUCH LOWER RATE.

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# Alternatives to the Direct Repair of Occlusive Lesions of Major Arteries

Harold C. Spear, M.D., Chang You Wu, M.D. and Charles A. Lipman, M.D

One of the most promising recent developments in reconstructive arterial surgery is the evolution of procedures of lesser magnitude as alternatives to the direct repair of lesions involving major vessels. These lesser procedures are generally advised in order to avoid a major intra-thoracic or intra-abdominal operation in poor-risk patients and also to avoid an operative area where technical difficulty or infection is anticipated.

As early as 1953, Dietrich[1] developed the technique of carotid-subclavian artery bypass grafting to lessen the risk associated with direct intra-thoracic repair of occlusive lesions in the proximal subclavian or common carotid arteries. The use of this extrathoracic bypass resulted in a dramatic lowering of operative mortality from 22% to 2%.[2] In 1962, the alternatives of axillary-femoral artery bypass[3,4] and femoral-femoral artery bypass[5] were devised to obviate direct intra-abdominal repair of aortoiliac lesions in complicated cases. Over the years, it has become evident that these superficial (generally subcutaneous) bypass procedures provide satisfactory long-term results with significantly lower morbidity and mortality rates. Consequently, extra-anatomic bypass procedures have virtually replaced direct surgery for proximal occlusive lesions of the aortic arch vessels, and they are being employed with increasing frequency as the primary procedure for correction of aortoiliac lesions in patients over age 70.

## Carotid-Subclavian and Axillary-Axillary Bypass Procedures

Atheromatous involvement of the origins of aortic arch vessels is relatively uncommon. However, lesions in this location may be associated with upper extremity and/or cerebral ischemia. In the case of the subclavian artery, stenosis or occlusion usually occurs proximal to the vertebral artery thus, a pressure gradient is produced between the basilar and distal subclavian arteries resulting in a reversal of vertebral arterial flow (blood in the vertebral artery flows into the distal subclavian artery rather than following the normal route to the basilar artery).[6] This hemodynamic change, referred to as "subclavian steal", may cause symptoms of basilar artery insufficiency manifested by vertigo, diplopia, and syncopal attacks. Symptoms may be aggravated by arm exercise which promotes the "steal" of blood to the upper extremity. Arm symptomatology per se is fairly common, and is characterized by weakness, numbness, and claudication in the affected extremity; the radial pulse is either diminished or absent.

At present, symptomatic occlusive lesions in the proximal aortic arch vessels are preferably managed by either carotid-subclavian bypass[1] or axillary-axillary bypass.[7] The latter procedure offers the distinct advantage of avoiding possible neurologic complications resulting from carotid artery surgery.

**Case #1:** A 54-year old diabetic woman was hospitalized because of marked weakness and claudication of the right upper extremity. There was a systolic blood pressure differential of 100 mm. Hg between the right and left arms, and no pulses were palpable on the right side. Arteriograms showed complete occlusion of the right subclavian artery just distal to the vertebral origin.

A right common carotid-subclavian artery Dacron bypass was inserted through a transverse supraclavicular approach. Postoperatively, the patient's symptoms were entirely relieved; there was restoration of right arm pulses, and blood pressure was 160/80 mm. Hg bilaterally. At follow-up two years later, the bypass graft was functioning well.

**Case #2:** A 67-year old woman experienced progressive muscular weakness of the right arm together with a transient episode of dysphasia shortly before hospitalization. A retrograde four-vessel arch study demonstrated complete occlusion of the left internal carotid and proximal right subclavian arteries with delayed filling of the distal subclavian by retrograde flow from the right vertebral artery (subclavian steal).

Axillary-axillary artery Dacron bypass grafting was

performed with resultant restoration of right upper extremity pulses and equalization of arm blood pressures.

### Axillary-Femoral Bypass

The aorto-iliac arterial system is also amenable to superficial extra-anatomic bypass procedures. Axillary-femoral artery bypass had been employed successfully in the management of both poor-risk patients with aortoiliac occlusive disease and ischemic rest pain or impending gangrene and patients requiring removal of an infected aortic graft. This procedure, however, must be viewed as a compromise operation since the long-term patency is variously reported as 50 to 75% compared to an 85% 5-year patency rate for aortofemoral bifurcation grafting.[9] Current technique involves insertion of a single axillary-femoral limb utilizing a knitted Dacron graft either 8 or 10 mm. in diameter; a side-limb is attached, tunneled subcutaneously across the suprapubic area, and sutured to the contralateral femoral artery. The more rapid flow through the long single axillary limb into both femoral arteries (better run-off) appears to improve long-term patency.

**Case #3:** A 74-year old woman was first seen in July, 1977, for incapacitating bilateral claudication together with ischemic rest pain. The patient had undergone aortofemoral Dacron bifurcation grafting in 1966, and a Dacron extension bypass to the left popliteal artery one year later. Translumbar aortography demonstrated total occlusion of the previously placed grafts with collateral filling of the right deep femoral and both the superficial and deep femoral arteries on the left side.

In order to avoid re-entering the previous operative site with its attendant increased morbidity-mortality risk, a left axillary-bilateral femoral arteries bypass and bilateral lumbar sympathectomy were performed. The graft was anastomosed to the deep femoral on the right and the common femoral on the left. The postoperative recovery was uncomplicated and at follow-up one year later, the patient continued to exhibit an excellent result with complete alleviation of symptoms.

### Femoral-Femoral Bypass

Femoral-femoral bypass was initially conceived as a salvage procedure for poor-risk patients with unilateral iliac artery occlusion;[5,8] subsequently, the procedure has gained increasing acceptance as the definitive operation for all except the very young patient. Long-term patency rates approach those reported for direct aortofemoral bypass, but morbidity and mortality are significantly less as the procedure is essentially subcutaneous and can be done under local anesthesia if indicated. Preoperative arteriographic confirmation of a normal aortoiliac system on the donor side is essential because any significant stenosis may result in a diminution of flow and development of claudication in the previously asymptomatic extremity. If the proximal circuit is normal or only minimally involved, flow can be doubled through the donor iliac artery and essentially normal circulation maintained to both legs. Femoral-femoral bypass can be combined with endarterectomy, femoral profundaplasty and femoral-popliteal bypass if necessary in order to achieve maximal circulatory improvement.

**Case #4:** An 80-year old man with advanced arteriosclerotic coronary artery disease and a lymphoma was seen in November, 1978, complaining of severe ischemic rest pain in the right foot. On physical examination, the right leg was pulseless and the foot appeared ischemic. There were adequate femoral, popliteal, and dorsalis pedis pulses in the left side. Translumbar arteriography revealed a small abdominal aortic aneurysm, complete occlusion of the left iliac system with reconstitution at the femoral level via collaterals; on the right side, the iliac and femoral arteries were patent.

A femoral-femoral artery Dacron bypass procedure was performed with complete relief of ischemic symptoms in the right foot.

### Summary

The substitution of superficial bypass procedures for the direct intracavitary repair of occlusive lesions of major arteries is reviewed. The indications for carotid-subclavian, axillary-femoral, and femoral-femoral bypass procedures are outlined and illustrated by representative case reports. The lowered morbidity-mortality offered by these alternative procedures and the prospects for their long-term success are now becoming well established.

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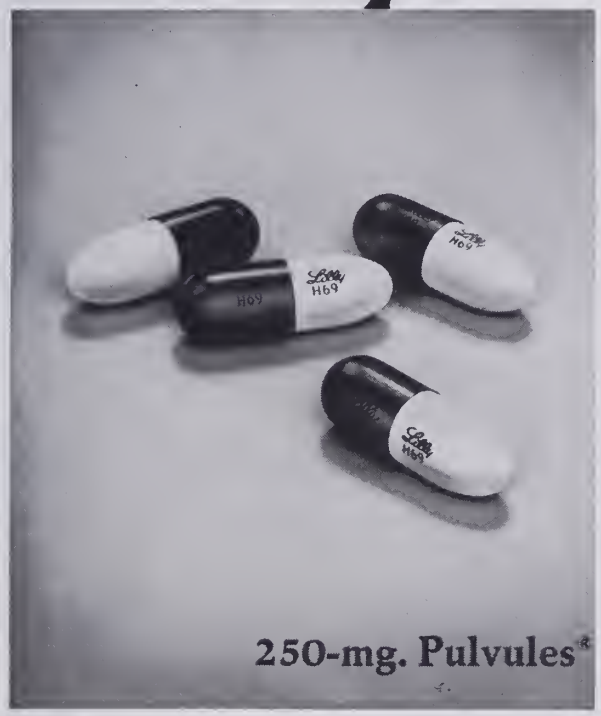


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**PRECAUTIONS:** Suicide is a possibility in depressed patients and may remain until significant remission occurs. Such patients should not have access to large quantities of this drug.

**Perphenazine:** Should not be used indiscriminately. Use with caution in patients who have previously exhibited severe adverse reactions to other phenothiazines. Likelihood of some untoward actions is greater with high doses. Closely supervise with any dosage. The antiemetic effect of perphenazine may obscure signs of toxicity due to overdosage of other drugs or make more difficult the diagnosis of disorders such as brain tumor or intestinal obstruction. A significant, not otherwise explained, rise in body temperature may suggest individual intolerance to perphenazine, in which case discontinue.

If hypotension develops, epinephrine should not be employed, as its action is blocked and partially reversed by perphenazine. Phenothiazines may potentiate the action of central nervous system depressants (opiates, analgesics, antihistamines, barbiturates, alcohol) and atropine. In concurrent therapy with any of these, TRIAVIL should be given in reduced dosage. May also potentiate the action of heat and phosphorous insecticides. There is sufficient experimental evidence to conclude that chronic administration of antipsychotic drugs which increase prolactin secretion has the potential to induce mammary neoplasms in rodents under the appropriate conditions. There are recognized differences in the physiological role of prolactin between rodents and humans. Since there are, at present, no adequate epidemiological studies, the relevance to human mammary cancer risk from prolonged exposure to perphenazine and other antipsychotic drugs is not known.

**Amitriptyline:** In manic-depressive psychosis, depressed patients may experience a shift toward the manic phase if they are treated with an antidepressant. Patients with paranoid symptomatology may have an exaggeration of such symptoms. The tranquilizing effect of TRIAVIL seems to reduce the likelihood of this effect. When amitriptyline HCl is given with anticholinergic agents or sympathomimetic drugs, including epinephrine combined with local anesthetics, close supervision and careful adjustment of dosages are required. Paralytic ileus may occur in patients taking tricyclic antidepressants in combination with anticholinergic-type drugs.

Caution is advised if patients receive large doses of ethchlorvynol concurrentl Transient delirium has been reported in patients who were treated with 1 g ethchlorvynol and 75-150 mg of amitriptyline HCl.

Amitriptyline HCl may enhance the response to alcohol and the effects barbiturates and other CNS depressants.

Concurrent administration of amitriptyline HCl and electroshock therapy ma increase the hazards associated with such therapy. Such treatment should b limited to patients for whom it is essential. Discontinue several days before electiv surgery if possible. Elevation and lowering of blood sugar levels have both bee reported. Use with caution in patients with impaired liver function.

**ADVERSE REACTIONS:** Similar to those reported with either constituent alon **Perphenazine:** Extrapyramidal symptoms (opisthotonus, oculogyric crisi hyperreflexia, dystonia, akathisia, acute dyskinesia, ataxia, parkinsonism) hav been reported and can usually be controlled by the concomitant use of effectiv antiparkinsonian drugs and/or by reduction in dosage, but sometimes persist aft discontinuation of the phenothiazine.

Tardive dyskinesia may appear in some patients on long-term therapy or ma occur after drug therapy with phenothiazines and related agents has bee discontinued. The risk appears to be greater in elderly patients on high-dos therapy, especially females. Symptoms are persistent and in some patients appe to be irreversible. The syndrome is characterized by rhythmical involunta movements of the tongue, face, mouth, or jaw. Involuntary movements of th extremities sometimes occur. There is no known treatment for tardive dyskinesi antiparkinsonism agents usually do not alleviate the symptoms. It is advised that antipsychotic agents be discontinued if the above symptoms appear. If treatment reinstituted, or dosage of the particular drug increased, or another drug subs tuted, the syndrome may be masked. Fine vermicular movements of the tongu may be an early sign of the syndrome. The full-blown syndrome may not develo if medication is stopped when lingual vermiculation appears.

Other side effects are skin disorders (photosensitivity, itching, erythem urticaria, eczema, up to exfoliative dermatitis); other allergic reactions (asthm laryngeal edema, angioneurotic edema, anaphylactoid reactions); peripher edema; reversed epinephrine effect; hyperglycemia; endocrine disturbance (lactation, galactorrhea, gynecomastia, disturbances of menstrual cycle); altere cerebrospinal fluid proteins; paradoxical excitement; hypertension, hypotensio tachycardia, and ECG abnormalities (quinidine-like effect); reactivation of ps chotic processes; catatonic-like states; autonomic reactions, such as dry mou or salivation, headache, anorexia, nausea, vomiting, constipation, obstipatio urinary frequency or incontinence, blurred vision, nasal congestion, and a chang in pulse rate; other adverse reactions reported with various phenothiazin compounds, but not with perphenazine, include grand mal convulsions, cerebr edema, polyphagia, pigmentary retinopathy, photophobia, skin pigmentation, ar failure of ejaculation.

The phenothiazine compounds have produced blood dyscrasias (pancyt penia, thrombocytopenic purpura, leukopenia, agranulocytosis, eosinophilia and liver damage (jaundice, biliary stasis).

Pigmentation of the cornea and lens has been reported to occur after long-ter administration of some phenothiazines. Although it has not been reported patients receiving TRIAVIL, the possibility that it might occur should be considere

Hypnotic effects, lassitude, muscle weakness, and mild insomnia have als been reported.

**Amitriptyline:** Note: Listing includes a few reactions not reported for this drug, b which have occurred with other pharmacologically similar tricyclic antidepressa drugs and must be considered when amitriptyline is administered. *Cardiovasc lar:* Hypotension; hypertension; tachycardia; palpitation; myocardial infarcti arrhythmias; heart block; stroke. *CNS and Neuromuscular:* Confusional state disturbed concentration; disorientation, delusions; hallucinations; excitemen anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesi of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; se zures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus; syndrome inappropriate ADH (antidiuretic hormone) secretion. *Anticholinergic:* Dry mout blurred vision; disturbance of accommodation; increased intraocular pressur constipation; paralytic ileus; urinary retention; dilatation of urinary tract. *Allergi* Skin rash; urticaria; photosensitization; edema of face and tongue. *Hematologi* Bone marrow depression including agranulocytosis; leukopenia; eosinophili purpura; thrombocytopenia. *Gastrointestinal:* Nausea; epigastric distress; vomi ing; anorexia; stomatitis; peculiar taste; diarrhea; parotid swelling; black tongu Rarely hepatitis (including altered liver function and jaundice). *Endocrine:* Testi ular swelling and gynecomastia in the male; breast enlargement and galactorrhe in the female; increased or decreased libido; elevated or lowered blood sug levels. *Other:* Dizziness, weakness; fatigue; headache; weight gain or los increased perspiration; urinary frequency; mydriasis; drowsiness; alopecia. *Wit drawal Symptoms:* Abrupt cessation after prolonged administration may produc nausea, headache, and malaise. These are not indicative of addiction.

**OVERDOSAGE:** All patients suspected of having taken an overdosage should b admitted to a hospital as soon as possible. Treatment is symptomatic an supportive. However, the intravenous administration of 1–3 mg of physostigmin salicylate is reported to reverse the symptoms of tricyclic antidepressant poisor ing. Because physostigmine is rapidly metabolized, the dosage of physostigmin should be repeated as required particularly if life-threatening signs such a arrhythmias, convulsions, and deep coma recur or persist after the initial dosage physostigmine. On this basis, in severe overdosage with perphenazine-amitri tyline combinations, symptomatic treatment of central anticholinergic effects wit physostigmine salicylate should be considered

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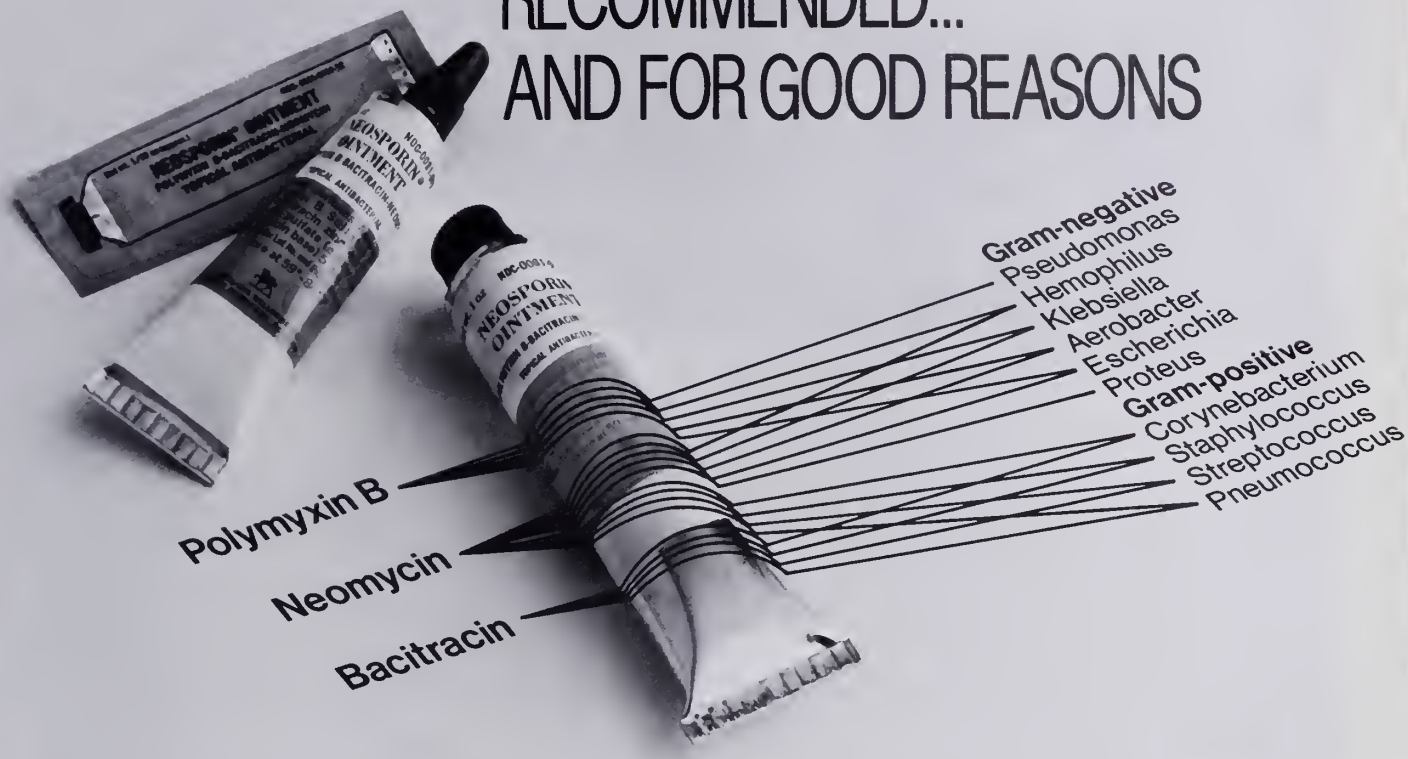


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**WARNING:** Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglyooside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as a failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.

**PRECAUTIONS:** As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

**ADVERSE REACTIONS:** Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.

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**DESCRIPTION:** Methyltestosterone is 17β-Hydroxy-17-Methylandrost-4-en-3-one. **ACTIONS:** Methyltestosterone is an oil soluble androgenic hormone. **INDICATIONS:** In the male: 1. Eunuchoidism and eunuchism. 2. Male climacteric symptoms when these are secondary to androgen deficiency. 3. Impotence due to androgenic deficiency. 4. Post-puberal cryptochidism with evidence of hypogonadism. Cholestatic hepatitis with jaundice and altered liver function tests, such as increased BSP retention, and rises in SGOT levels, have been reported after Methyltestosterone. These changes appear to be related to dosage of the drug. Therefore, in the presence of any changes in liver function tests, drug should be discontinued. **PRECAUTIONS:** Prolonged dosage of androgen may result in sodium and fluid retention. This may present a problem, especially in patients with compromised cardiac reserve or renal disease. In treating males for symptoms of climacteric, avoid stimulation to the point of increasing the nervous, mental, and physical activities beyond the patient's cardiovascular capacity. **CONTRAINDICATIONS:** Contraindicated in persons with known or suspected carcinoma of the prostate and in carcinoma of the male breast. Contraindicated in the presence of severe liver damage. **WARNINGS:** If priapism or other signs of excessive sexual stimulation develop, discontinue therapy. In the male, prolonged administration or excessive dosage may cause inhibition of testicular function, with resultant oligospermia and decrease in ejaculatory volume. Use cautiously in young boys to avoid premature epiphyseal closure or precocious sexual development. Hypersensitivity and gynecomastia may occur rarely. PBI may be decreased in patients taking androgens. Hypercalcemia may occur, particularly during therapy for metastatic breast carcinoma. If this occurs, the drug should be discontinued. **ADVERSE REACTIONS:** Cholestatic jaundice • Oligospermia and decreased ejaculatory volume • Hypercalcemia particularly in patients with metastatic breast carcinoma. This usually indicates progression of bone metastases • Sodium and water retention • Priapism • Virilization in female patients • Hypersensitivity and gynecomastia. **DOSAGE AND ADMINISTRATION:** Dosage must be strictly individualized, as patients vary widely in requirements. Daily requirements are best administered in divided doses. The following is suggested as an average daily dosage guide. **In the male:** Eunuchoidism and eunuchism, 10 to 40 mg.; Male climacteric symptoms and impotence due to androgen deficiency, 10 to 40 mg.; Postpuberal cryptorchism, 30 mg. **REFERENCE:** R. B. Greenblatt, M.D., R. Withenington, M.D.; I. B. Sipahioglu, M.D.: Hormones for Improved Sexuality in the Male and the Female Climacteric. *Drug Therapy*, Sept. 1976. **SUPPLIED:** 5, 10, 25 mg. in bottles of 60, 250. Rx only

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# ORGANIZATION

## Flagler County Medical Society Receives FMA Charter

The Flagler County Medical Society, the newest component of the Florida Medical Association, received its FMA charter on July 10 during a dinner meeting at the Palm Coast Yacht Club.

The important document was presented by James G. White, M.D., of Ormond Beach, a member of the FMA Board of Governors, to the Society's President, John M. Canakaris, M.D., of Bunnell. The FMA House of Delegates approved issuance of the charter at the Annual Meeting last May on recommendation of The Judicial Council.

John Thrasher, J.D., FMA legal counsel, also participated in the charter presentation.

Besides Dr. Canakaris, other officers of the fledgling county medical society are: Edward H. Scarpitti, M.D., St. Augustine, Vice President; Eduardo Barrera, M.D., Bunnell, Secretary; and Morris R. Carter Jr., M.D., Daytona Beach, Treasurer.

The Flagler County Medical Society has about 16 members, many of whom formerly were members of the St. Johns County Medical Society, which has been dissolved. FMA now has 45 county medical societies.

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## Correction

**Due to an unfortunate transposition of type, *The Journal* erred in its report on the 1979 Annual Meeting Scientific Exhibit Awards which appeared on Page 718 of the July issue.**

**The titles of the first and second-place winners were listed correctly, but the names of the sponsors were transposed. The two winners should have read as follows:**

FIRST PLACE

***"When a Patient Asks About Vitrectomy"***

**W. Sanderson Grizzard, M.D., Mr. Stephen Gordon, and Elise Torczynski, M.D., Department of Ophthalmology, University of South Florida College of Medicine, Tampa.**

SECOND PLACE

***"Treatment of Fingertip Injuries with Presentation of a New Technique (Tubular Advancement Flap)"***

**Mas G. Massoumi, M.D., West Palm Beach**

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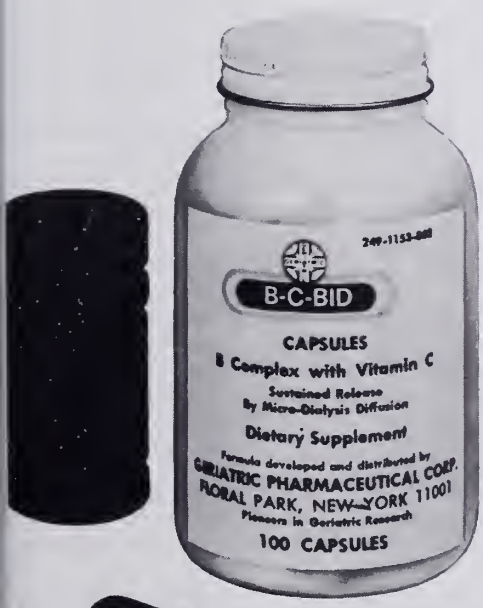


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# MEDICAL MESSAGE
from the Florida Doctors

## HEALTH QUACKERY

Most people would balk at the mere hint that they may have been duped by a quack. Others think quackery is a thing of the past unable to entice today's sophisticated health care consumer.

The tremendous advances made by modern medicine are evident every day, but illness and suffering still exist, and quackery thrives wherever there is illness. It preys on people's fears, promising miraculous cures, tremendous results and secret remedies for a price.

Too often, the victim of a health quack loses more than money in seeking a quick cure for his ill. There is often a period in illness when efficient diagnosis and sound treatment can make the difference between life and death, and the quack robs his patient of this opportunity. When such treatment is available to everyone at a reasonable price, how can quackery exist? Because the quack's approach is clever, and he thrives on people's fears for their health.

How can the average person avoid becoming the victim of a quack? When seeking health care, consider several points, and your chances of becoming a victim will be greatly reduced. First, avoid the person who claims to have a secret formula or machine that guarantees a cure. Beware of the person who promises or implies a quick or easy cure or who talks of "pepping up" your health. Be on guard of one who advertises using case histories or testimonials designed to impress the public. A quack often refuses to accept tried and proved methods of medical research and proof, instead calling for further investigation while simultaneously avoiding tests or withholding data needed for scientific evaluation.

In addition, the quack often complains that he is being persecuted and that the medical profession is afraid of competition. Finally, beware of people who claim their method of treatment is better than surgery, x-rays or drugs prescribed by a physician.

Great strides have been made in eliminating the health quack, but it remains a stubborn

problem which can best be eliminated through public education.

If you have a health problem, consult your family physician. He knows your health history, and has the best training and education available to help him make an accurate diagnosis, and provide the best method of treatment.

*This is a medical message from the Florida Medical Association in behalf of the doctors of Florida and as a public service feature.*

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Pyridoxine HCL (B-6) .....10 mg.
**DOSE:** 1 to 3 tablets daily.
**AVAILABLE:** Bottles of 100, 500.

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Each blue tablet contains:
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Niacinamide .....75 mg.
Ascorbic Acid.....150 mg.
Thiamine HCL (B-1) .....25 mg.
Riboflavin (B-2).....2 mg.
Pyridoxine HCL (B-6) .....10 mg.
**DOSE:** 1 to 5 tablets daily.
**AVAILABLE:** Bottles of 100, 500.

**Indications:** For use as a vasodilator in the symptoms of cold feet, leg cramps, dizziness, memory loss or tinnitus when associated with impaired peripheral circulation. Also provides concomitant administration of the listed vitamins. The warm tingling flush which may follow each dose of LIPO-NICIN® 100 mg. or 250 mg. is one of the therapeutic effects that often produce psychological benefits to the patient.

**Side Effects:** Transient flushing and feeling of warmth seldom require discontinuation of the drug. Transient headache, itching and tingling, skin rash, allergies and gastric disturbance may occur.

**Contraindications:** Patients with known idiosyncrasy to nicotinic acid or other components of the drug. Use with caution in pregnant patients and patients with glaucoma, severe diabetes, impaired liver function, peptic ulcers, and arterial bleeding.

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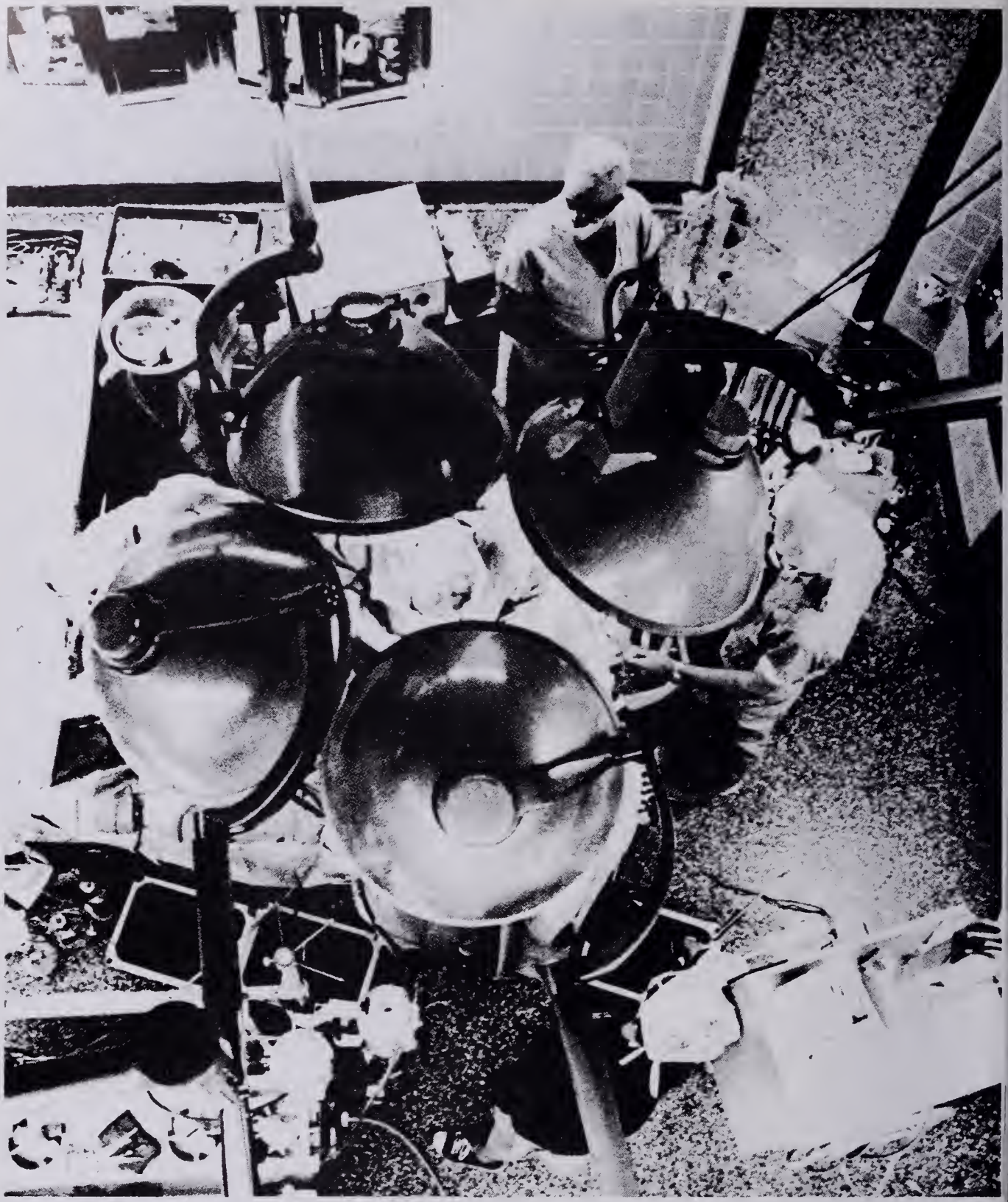

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# Pinworm: simply awful

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# Vermox: awfully simple

## No dosage calculation

**one dose** single VERMOX 100 mg tablet is the treatment for pinworm in both adults and children* of all body weights; no dosage calculations or confusion

**one time** the VERMOX tablet may be taken any time that is convenient, so that normal routines won't be interrupted; convenient schedule encourages compliance

**one tablet** chewable, orange-flavored VERMOX tablet may also be crushed and mixed or simply swallowed; no messy liquid to spill and no dye to stain

**95% cure** mean cure rate in clinical studies was 95% (range: 90%-100%) after treatment with one VERMOX tablet; in cases of reinfection, a second tablet is advised

* Because Vermox has not been extensively studied in children under two years of age, the relative benefit/risk should be considered before treating these children. Vermox is contraindicated in pregnancy (see: Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

# Vermox chewable tablets
TRADEMARK
(mebendazole)

**Description** VERMOX (mebendazole) is methyl 5-benzoylbenzimidazole-2-carbamate.

**Actions** VERMOX exerts its anthelmintic effect by blocking glucose uptake by the susceptible helminths, thereby depleting the energy level until it becomes inadequate for survival.

In man, approximately 2% of administered mebendazole is excreted in urine as unchanged drug or a primary metabolite. Following administration of 100 mg of mebendazole twice daily for three consecutive days, plasma levels of mebendazole and its primary metabolite, the 2-amine, never exceeded 0.03 $\mu$ g/ml and 0.09 $\mu$ g/ml, respectively.

**Indications** VERMOX is indicated for the treatment of *Trichuris trichiura* (whipworm), *Enterobius vermicularis* (pinworm), *Ascaris lumbricoides* (roundworm), *Ancylostoma duodenale* (common hookworm), *Necator americanus* (American hookworm) in single or mixed infections. Efficacy varies in function of such factors as pre-existing diarrhea and gastrointestinal transit time, degree of infection and helminth strains.

**Contraindications** VERMOX is contraindicated in pregnant women (see: Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

**Precautions** *PREGNANCY:* VERMOX has shown embryotoxic and teratogenic activity in pregnant rats at single oral doses as low as 10 mg/kg. Since VERMOX may have a risk of producing fetal damage if administered during pregnancy, it is contraindicated in pregnant women.

*PEDIATRIC USE:* The drug has not been extensively studied in children under two years; therefore, in the treatment of children under two years the relative benefit/risk should be considered.

**Adverse reactions** Transient symptoms of abdominal pain and diarrhea have occurred in cases of massive infection and expulsion of worms.

**Dosage and administration** The same dosage schedule applies to children and adults. The tablet may be chewed, swallowed or crushed and mixed with food.

For the control of pinworm (enterobiasis), a single tablet is administered orally, one time.

For the control of roundworm (ascariasis), whipworm (trichuriasis), and hookworm infection, one tablet of VERMOX is administered, orally, morning and evening, on three consecutive days.

If the patient is not cured three weeks after treatment, a second course of treatment is advised. No special procedures, such as fasting or purging, are required.

**How supplied** VERMOX is available as chewable tablets, each containing 100 mg of mebendazole, and is supplied in boxes of twelve tablets.

VERMOX (mebendazole) is an original product of Janssen Pharmaceutica, Belgium, and co-developed by Ortho Pharmaceutical Corporation.

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# Book Reviews

**Book Review Editor**

**F. Norman Vickers, M.D.**

**Dress for Success** by John T. Molloy, 239 pages. Price $2.50. Warner Books, New York, 1976. Paperback.

Who needs instructions on how to dress to make a favorable impression on others? Most of us, so says John Molloy, author of *Dress for Success*. He tells how he, as a teacher, got involved in dress and motivating students. He did some studies on student behavior as related to similar teachers. One teacher dressed casually while the other dressed in a more formal manner. Students appeared to give the traditionally dressed teacher more respect.

Although Molloy does not discount competence and friendliness as a part of success, his point is that in our society the first impression that others have of us determines whether or not we get that second chance to show our other attributes.

He has tips for buying the right clothes on sale. Many of his clients go to New York at sale time and "save" more than the travel and hotel expenses on bargains in good clothes.

Regarding physicians, he says, "Medical men fall into a very unusual category, and although most medical men couldn't be less concerned with their appearance, they should be. There are five basic uniforms that medical men wear — let me start with the worst. The upper-middle-class suit is absolutely taboo; most people object to a doctor looking like a successful businessman. Next comes the neutral suit — the dark blue solid or, in the Midwest, some shades of brown. The neutral suit is basically classless, and a doctor can wear it, but I advise against it. Many doctors wear conservative sport jackets and slacks as a matter of course, and of all 'street clothing' this is probably the best combination, acceptable for all purposes other than extremely serious consultations."

Molloy further says, "The doctor's hospital all-whites, worn without a shirt and tie, are the next-to best thing he can wear while working. It is a high authority outfit. But the best outfit, and the one that is the easiest to affect, is slacks worn with an upper-middle-class shirt and upper-middle-class tie and white doctor's jacket. This look conveys that the doctor is a member of an elite group. It definitely identifies him as a doctor and, as much as appearance can accomplish this, makes whatever he says and does seem all but infallible."

I certainly don't subscribe to all the "rules of dress" which the author relates. In some instances, I think they are Machiavellian (his word) or phony (my judgment). But remember, this book was directed to the general public. However, it was worth the price of the book just to see the "rules of dress" enumerated. It makes people-watching just that much more interesting.

F.N.V.


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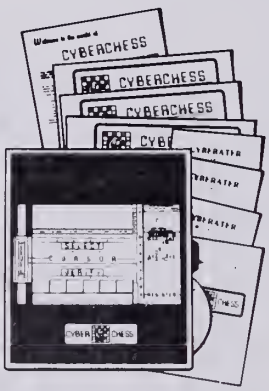


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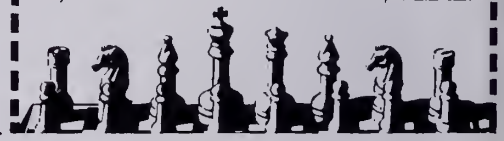

# Books Received

**Receipt of the following books is acknowledged. Medical readers interested in reviewing particular books are invited to address requests to the Book Review Editor. Following acceptance of a written review for publication, a reviewer may then retain the book reviewed for his personal or favorite library.**

**The Chemistry of Human Behavior** by Herbert L. Meltzer, Ph.D. 261 Pages. Illustrated. Price $17.95 (cloth). Nelson-Hall Publishers, Chicago, 1979.

**Cry Babel, The Nightmare of Aphasia and a Courageous Woman's Struggle to Rebuild Her Life** by April O. Armstrong. 252 Pages. Price $8.95. Doubleday & Company, New York, 1979.

**Annual Review of Neuroscience** with 31 contributing authors. 555 Pages. Annual Reviews, Inc., Palo Alto, California, 1979.

**Norethindrone, The First Three Decades** edited by Mary Jean Pramik. 100 Pages. Syntex Laboratories, Palo Alto, California, 1978.

**Family Health in an Era of Stress** conducted by Yankelovich, Skelly and White, Inc. 192 Pages (plus packet). General Mills, Inc., Minneapolis, Minnesota, 1979.

**Correlative Neuroanatomy & Functional Neurology, 17th Edition,** by Joseph G. Chusid, M.D. 464 Pages. Illustrated. Price $12.00. Lange Medical Publications, Los Altos, California, 1979.

**The Heritage of Aviation Medicine, An Annotated Directory of Early Artifacts,** by Robert J. Benford, M.D. 122 Pages. Illustrated. Price $4.50. Aerospace Medical Association, Washington, D.C., 1979.

**Women Can Wait, The Pleasures of Motherhood After Thirty** by Terri Schultz. 191 Pages. Price $4.95. Doubleday & Company, New York, 1979.

**Clear Skin, A Step-by-Step Program to Stop Pimples, Blackheads, Acne** by Kenneth L. Flandermeyer, M.D. 211 Pages. Illustrated. Price $8.95. Little, Brown & Company, Canada, 1979.

**Instructions for Parents** by Matthew M. Cohen, M.D. 232 Pages. Price $22.50. Appleton-Century-Crofts, New York, 1979.

**Review of Physiological Chemistry** by Harold A. Harper, Ph.D., Victor W. Rodwell, Ph.D., and Peter A. Mayes, Ph.D., D. Sc. 702 Pages. Price $14.50. Lange Medical Publications, Los Altos, California, 1977.

**Review of Allied Health Education: 3,** Joseph Hamburg, General Editor. 161 Pages. Price $7.50. The University Press of Kentucky, Lexington, Ky., 1979.

# Deaths

**Ajac, John C.,** Winter Haven; born 1903; Georgetown Medical, 1930; member AMA; died May 15, 1979.

**Bendler, Carl Henry,** Lake Mary; born 1904; University of Louisville, 1929; member AMA; died March 30, 1979.

**Gascoigne, Clarence C.,** Bradenton; born 1904; Marquette University, 1930; member AMA; died May 5, 1979.

**Hillman, Charles C.,** Miami; born 1887; University of Chicago, 1921; died June 13, 1979.

**King, F. Gordon,** Jacksonville; born 1910; Emory University, 1934; died June 2, 1979.

**Konstantinou, Ilias,** Sarasota; born 1920; University of Innsbruck, 1946; died July, 1979.

**Lombardo, Samuel S.,** Jacksonville; born 1913; University of Illinois, 1940; member AMA; died June 26, 1979.

**McIver, Robert B.,** Jacksonville; born 1892; Jefferson Medical College of Philadelphia, 1916; member AMA; died July 9, 1979.

**Oberdorfer, Aaron Z.,** Jacksonville; born 1907; Emory University, 1931; member AMA; died June 25, 1979.

**Podoll, Elliott,** Key Biscayne; born 1919; University of Louisville, 1943; member AMA; died June 30, 1979.

**Smith, Vincent V.,** Ft. Lauderdale; born 1896; University of Cincinnati, 1921; died May, 1979.

**Spore, Barry Lee,** St. Petersburg; born 1947; Cincinnati Medical College, 1973; died June 25, 1979.

**Starke, Lancaster C.,** Deland; born 1901; MeHarry Medical College, 1927; died May 3, 1979.

**Strum, Steven C.,** Miami; born 1946; Jefferson Medical College, 1972; died April 8, 1979.

**Tschetter, Thomas H.,** Pensacola; born 1944; University of Minnesota, 1970; died July 11, 1979.

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# MEETINGS

## Approved by the FMA Committee on Continuing Medical Education

### NOVEMBER

**Florida Pediatric Society,** Nov. 1-4, Ponte Vedra. For information: Thomas Greiwe, M.D., 2550 W. Buffalo Ave., Tampa 33607.

**EKG Interpretation and Arrhythmia Management,** Nov. 2-4, Don CeSar Beach Hotel, St. Petersburg. For information: Stephen E. Mattingly, 64 Inverness Dr. E., Englewood, Colorado 80112.

**Family Practice Weekend,** Nov. 2-4, Sheraton River Inn, Miami. For information: Stanley Sinclair, M.D., Dept. of Family Medicine, Box 016700, Miami 33101.

**10th Family Practice Review**, Nov. 5-9, Orlando Hyatt Hotel, Kissimmee.**

**Breast Cancer Therapy**, Nov. 6, Holy Cross Hospital, Fort Lauderdale. For information: Jon R. Fichtelman, M.D., P.O. Box 23460, Fort Lauderdale 33307.

**Antibiotics — Infectious Disease Seminar,** Nov. 6, Don CeSar Resort Hotel, St. Petersburg. For information: Walter W. Hamilton, M.D., 432 Pasadena Ave. S., St. Petersburg 33707.

**Current Therapies in Perinatology,** Nov. 11-18, University of Miami School of Medicine, Miami.*

**Update in Hypertension,** Nov. 13, Manatee Memorial Hospital, Bradenton. For information: Leonides Y. Teves, M.D., 706 39th St. W., Bradenton 33505.

**Common Pediatric Emergencies,** Nov. 15-17, Caribbean Gulf Hotel, Clearwater Beach. For information: Emergency Care Continuing Education Center, P.O. Box 9639, Marina Del Rey, California 90291.

**Pediatric Lung Disease Seminar,** Nov. 17, Memorial Hospital, Hollywood. For information: Tillinghast Lybass, M.D., 705 North Olive Ave., West Palm Beach 33401.

**Review & Overview in EEG,** Nov. 17-19, Hilton Hotel, Jacksonville. For information: Jacob Green, M.D., 2550 Park St., Jacksonville 32204.

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***For information: Contact Division of Continuing Medical Education, D23-3, University of Miami School of Medicine, P.O. Box 016960, Miami 33101. Tel. (305) 547-6716.**

****For information: Contact Division of Continuing Education, Box J-233, J. Hillis Miller Health Center, Gainesville 32610. Tel. (904) 392-3143, or 392-3183.**

**+For information: Contact Janifer M. Judisch, M.D., CME, University of South Florida, Tampa 33620. Tel. (813) 974-2074.**

**Laparoscopy Course,** Nov. 19-20, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th St., Jacksonville 32209.

**Review Course in Family Practice,** Nov. 26-30, Stone's Travelodge, Tampa. For information: Frederick Firestone, M.D., University of South Florida, College of Medicine, Box 13, 12901 N. 30th St., Tampa 33612.

**Perplexing Cardiac Arrhythmias in Private Practice,** Nov. 28, Mt. Sinai Medical Center, Miami Beach. For information: Esther Cohen, CME Coordinator, 4300 Alton Rd., Miami Beach 33140.

**Uveitis Symposium,** Nov. 29-30, Medical Center, University of South Florida, Tampa.+

**5th Annual Course in Behavorial Neurology and Neuropsychology,** Nov. 29-Dec. 1, Daytona Hilton, Daytona Beach. For information: Edward Valenstein, M.D., Box J-236, JHM Health Center, Gainesville 32610.

**3rd Annual Medical Aspects of Aging,** Nov. 30-Dec. 1, Holiday Inn-University Center, Gainesville.**

### DECEMBER

**El Curso Interamericano: Temas Clinicos En Oftalmologia (In Spanish),** Dec. 3-7, Hotel Intercontinental, Miami.*

**Recent Advances in Treatment of Sleep Disorders,** Dec. 5, Mt. Sinai Medical Center, Miami Beach. For information: CME Coordinator, Mt. Sinai Medical Center, 4300 Alton Rd., Miami Beach 33140.

**Critical Care Gastroenterology,** Dec. 5-7, Contemporary Resort Hotel, Walt Disney World, Lake Buena Vista. For information: Postgraduate Courses Department, American College of Physicians, 4200 Pine Street, Philadelphia, PA 19104.

**Diabetes Update — 1979,** December 6, Curtis Hixon Convention Hall, Tampa. For information: R. V. Farese, M.D., University of South Florida, College of Medicine, Tampa 33612.

**Family Practice Seminar,** Dec. 6-8, South Seas Plantation, Captiva.*

**Neuro-Ophthalmology,** Dec. 6-8, Key Biscayne Hotel, Key Biscayne.*

**Pulmonary Function Studies,** Dec. 8, Holy Cross Hospital, Fort Lauderdale. For information: Jon R. Fichtelman, M.D., P.O. Box 23460, Fort Lauderdale 33307.

**Training Institute on Addictions**, Dec. 9-14, Deauville Hotel, Miami Beach. For information: The U.S. Journal of Drug and Alcohol Dependence, Inc., 2119-A Hollywood Blvd., Hollywood 33020.

**Fetal Monitoring**, Dec. 10-11, Sheraton Sand Key, Clearwater. For information: Jeanette T. Abich, R.N., Morton F. Plant Hospital, Box 210, Clearwater 33517.

**Hypertension**, Dec. 11, Manatee Memorial Hospital Auditorium, Bradenton. For information: Leonides Y. Teves, M.D., 706 39th St., W., Bradenton 33505.

**Ob-Gyn Ultrasound Seminar**, Dec. 12-16, Royal Beach Hotel & Racquet Club, Key Biscayne.*

**Laparoscopy Course**, Dec. 17-18, University Hospital, Jacksonville. For information: Robert J. Thompson, M.D., 655 West 8th Street, Jacksonville 32209.

JANUARY

**Mid-Winter Cruise on Intensive Care**, Jan. 5-15, Aboard the "S/S DORIC".*

**17th Annual Postgraduate Seminar in Anesthesiology**, Jan. 10-13, Americana Hotel, Miami Beach. For information: Dept. of Anesthesiology, Mt. Sinai Medical Center, 1200 N.W. 10th Ave., Miami 33136.

**Law and the Emergency Department**, Jan. 11, Miami. For information: Emergency Medical Services Symposium, 3900 N.W. 79th Ave., Suite 469, Miami 33166.

**25th Annual Cardiovascular Seminar**, Jan. 11-12, Holiday Inn, Longboat Key. For information: E. Jerry Eatman, P.O. Box 12407, St. Petersburg 33733.

**Trinidad/Tabago Seminar**, Jan. 13-20, Trinidad, West Indies. For information: Dept. of Anesthesiology, Mt. Sinai Medical Center, 1200 N.W. 10th Ave., Miami 33136.

**Second Annual Walt Disney World Pulmonary Wintercourse**, Jan. 14-17, Contemporary Resort Hotel, Lake Buena Vista. For information: Asher Marks, M.D., Chairman, Pulmonary Wintercourse Planning Committee, c/o Florida Lung Association, Box 8127, Jacksonville 32211.

**Oral Pathology Review**, Jan. 16-18, University of Miami School of Medicine, Miami.*

**Art and Science in the Therapy of Difficult Problems in Surgery**, Jan. 16-19, Americana Hotel, Bal Harbour.*

**Continuing Education in Pediatrics — 1980**, Jan. 20-24, Diplomat Resorts, Hollywood Beach. For information: Donald H. Altman, M.D., 6125 S.W. 31st St., Miami 33155.

**Gynecologic Surgery Symposium**, Jan. 20-25, Royal Biscayne Beach Hotel & Racquet Club, Key Biscayne.*

**Echocardiography In-Service Workshops**, Jan. 21-25, University of Miami, Jackson Memorial Medical Center, Miami.*

**Intensive Care for Neurological Trauma and Disease**, Jan 24-27, Americana Hotel, Bal Harbour.

**Far East Orient Seminar in Anesthesiology**, Jan. 26-Feb. 10, Philippines/Hong Kong/Thailand — Honolulu (optional). For information: Dept. of Anesthesiology, Mt. Sinai Medical Center, 1200 N.W. 10th Ave., Miami 33136.

**Pediatric Nephrology VII**, Jan. 27-30, Americana Hotel, Bal Harbour.*

**Family Practice Clinical Conference**, Jan. 27-Feb. 1, Lake Buena Vista. For information: Orris Rollie, M.D., Florida Hospital, Orlando.

**A Neurological Update**, Jan. 28-Feb. 1, Americana Hotel, Bal Harbour.*

**5th Annual Review and Recent Practical Advances in Pathology**, Jan. 28-Feb. 1, Americana Hotel, Bal Harbour.*

FEBRUARY

**12th Annual Postgraduate Seminar in Adult & Pediatric Urology**, Feb. 6-9, Hotel Intercontinental, Miami. For information: Victor Politano, M.D., 6614 Miami Lakes Dr., East Miami Lakes 33014.

**National Burn Seminar**, Feb. 8-9, Gainesville Hilton, Gainesville.**

**Gynecologic Oncology Seminar**, Feb. 10-15, Royal Biscayne Beach Hotel & Racquet Club, Key Biscayne.*

**Glaucoma**, Feb. 14-16, Holiday Inn, Civic Center, Miami.*

**1st Annual Family Practice Update**, Feb. 18-22, Daytona Beach. For information: Ken Mead, Post Office Box 1990, Daytona Beach 32015.

**Nuclear Cardiology In-Service Workshop**, Feb. 18-22, University of Miami, Jackson Memorial Medical Center, Miami.*

**Florida Midwinter Seminar in Ophthalmology & Otolaryngology**, Feb. 24-Mar. 1, Bahia Mar Hotel, Ft. Lauderdale.*

**12th Teaching Conference in Clinical Cardiology**, Feb. 27-Mar. 1, Americana Hotel, Bal Harbour.*

**7th Annual Selected Topics in Urology**, Feb. 28-Mar. 1, Gainesville Hilton, Gainesville.**

**Pediatric Dermatology Seminar**, Feb. 28-Mar. 2, Eden Roc Hotel, Miami Beach. For information: Guinter Kahn, M.D., 16800 N.W. 2nd Ave., Suite 401, North Miami Beach 33169.

**Basic Life Support**, Feb. 29, Pasco-Hernando Community College, New Port Richey. For information: James M. Marlowe, M.D., Box 249, Elfers.

**Ninth Annual Postgraduate Seminar in Dermatology**, Feb. 29-Mar. 2, Carillon Hotel, Miami Beach.*

## MARCH

**Advanced Cardiac Life Support,** Mar. 1-2, Pasco-Hernando Community College, New Port Richey. For information: James M. Marlowe, M.D., Box 249, Elfers.

**Oncology for Family Practitioner and Internist,** Mar. 1-8, Caribbean Cruise.*

**OB-GYN Caribbean Cruise.***

**Basic Neurology for Psychiatrists and Generalists,** Mar. 3-7, Konover Hotel, Miami Beach.*

**Postgraduate Medical Refresher Course,** Mar. 3-14, Galt Ocean Mile Hotel, Ft. Lauderdale. For information: Donald R. Lannin, M.D., 832 Central Medical Building, St. Paul, MN 55104.

**Mediclinics,** Mar. 3-14, Galt Ocean Mile Hotel, Ft. Lauderdale. For information: Donald R. Lannin, M.D., 832 Central Medical Bldg., St. Paul, MN 55104.

**6th Annual Virginia Apgar Seminar,** Obstetric and Pediatric Anesthesia, March 7-9, Americana Hotel, Miami Beach. For information: Dept. of Anesthesia, Mt. Sinai Medical Center, 1200 N.W. 10th Ave., Miami 33136.

**15th Annual Postgraduate Course in Internal Medicine — 1980,** Mar. 9-15, Americana Hotel, Bal Harbour.*

**Problems in Rheumatology,** March 12-15, Don CeSar Beach Resort Hotel, St. Petersburg Beach. For information: Bernard F. Germain, M.D., Division of Rheumatology, Dept. of Internal Medicine, University of South Florida College of Medicine, Tampa 33612.

**Ob-Gyn Cruise Seminar,** Mar. 12-24, Aboard the "DORIC".*

**11th Annual Topics in Internal Medicine,** March 20-22, Gainesville Hilton, Gainesville.**

**6th Annual Postgraduate Seminar in I.V. and I.M. Dental Sedation,** March 20-23, Americana Hotel, Miami Beach. For information: Dept. of Anesthesiology, Mt. Sinai Medical Center, 1200 N.W. 10th Ave., Miami 33136.

**Oral and Maxillofacial Surgery Seminar,** Mar. 22-23, Bal Harbour.*

**Hepatobiliary Disease,** Mar. 27-29, Americana Hotel, Bal Harbour.*

**Current Clinical Concepts in Otolaryngology,** Mar. 27-29, Americana Hotel, Bal Harbour.*

**11th Family Practice Review,** March 31-April 4, Orlando Hyatt Hotel, Kissimmee.**


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November 30-December 2
Cincinnati, OH

December 7-9
Phoenix, AZ

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**1980**

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March 21-23
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**DOSAGE AND ADMINISTRATION:**
1 tablet upon retiring. When necessary, 1 additional tablet may be taken following the evening meal.

Product Information as of September, 1977

U.S. Patent 2,985,558

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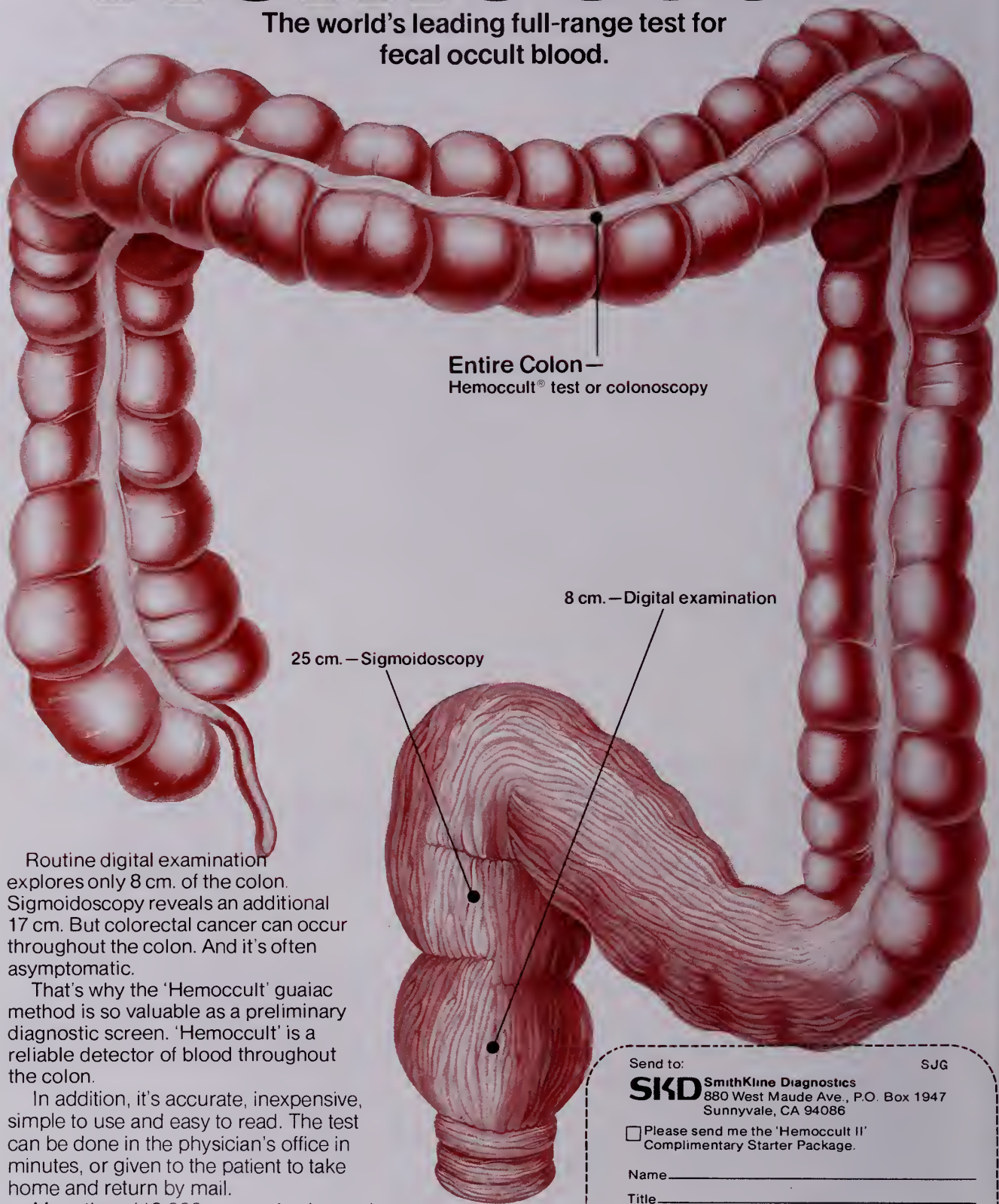


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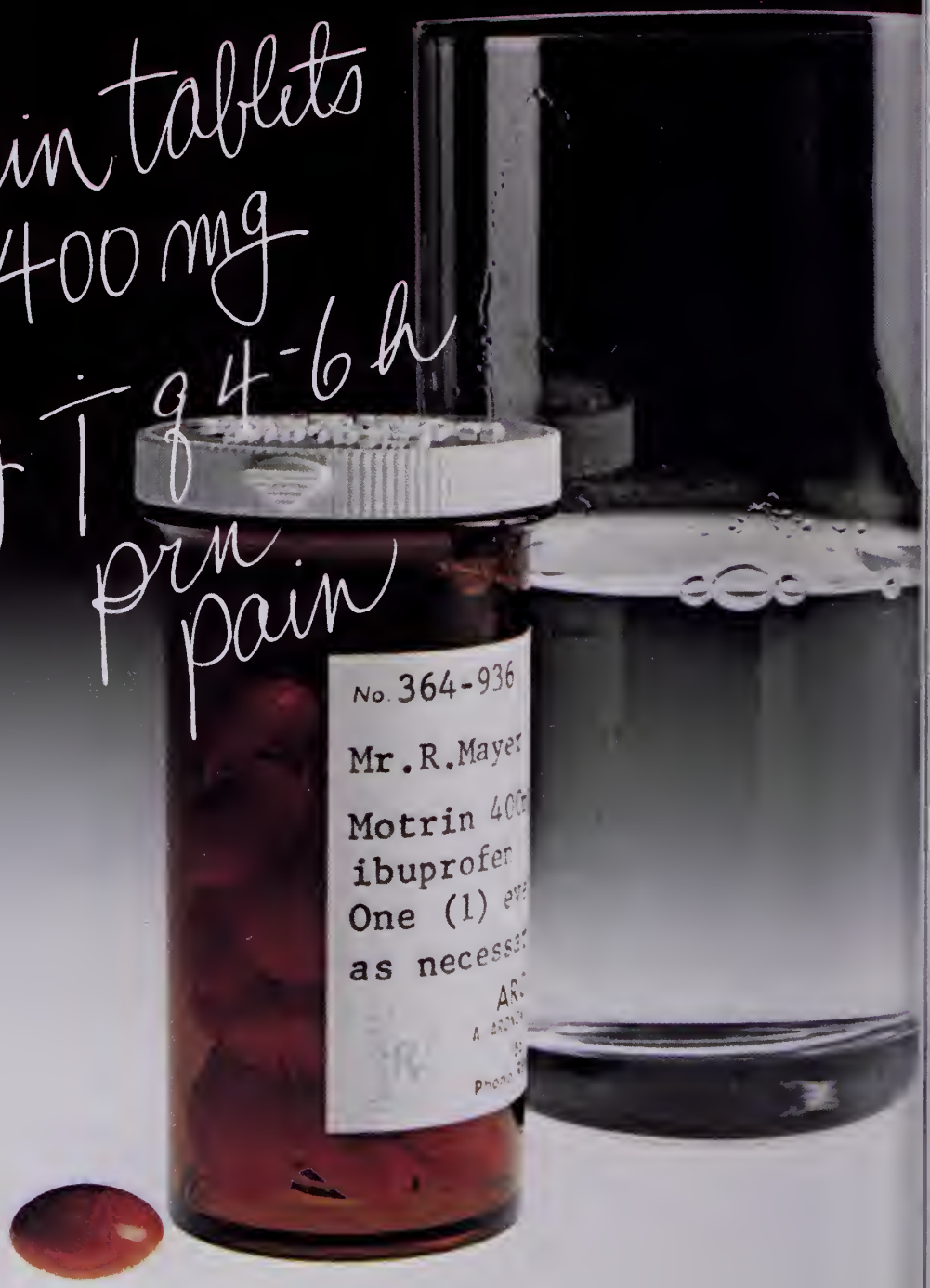


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| Mean relief-of-pain scores* (No. patients reporting) | Motrin 400 mg ibuprofen | .89 (108) | 1.25 (108) | 1.36 (108) | 1.28 (107) | 1.19 (106) |
| | Darvon 65 mg propoxyphene | .66 (100) | .99 (99) | 1.13 (96) | .99 (96) | .80 (96) |
| Statistical significance | | $p<0.02$ | $p<0.01$ | $p<0.05$ | $p<0.02$ | $p<0.002$ |

*0 = No relief 1 = Partial relief 2 = Complete relief

Data on file at The Upjohn Company

Motrin demonstrated statistically significant greater relief of pain than did Darvon at all time intervals.

# Motrin 400 mg TABLETS
## ibuprofen, Upjohn

- Not a narcotic • Not addictive • Not habit forming
- Rapid analgesic action • Indicated in acute and chronic pain
- Well tolerated. The most common side effect with Motrin is mild gastrointestinal disturbance.

Please turn the page for a brief summary of prescribing information.

Upjohn

# Motrin® (ibuprofen) now proved an effective analgesic for mild to moderate pain

**Motrin® Tablets** (ibuprofen, Upjohn)

**Indications and Usage:** Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

Relief of mild to moderate pain.

**Contraindications:** Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

**Warnings:** Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

**Precautions:** Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

**Drug interactions.** *Aspirin:* used concomitantly may decrease Motrin blood levels. *Coumarin:* Bleeding has been reported in patients taking Motrin and coumarin.

**Pregnancy and nursing mothers:** Motrin should not be taken during pregnancy or by nursing mothers.

**Adverse Reactions**

*Incidence greater than 1%*

**Gastrointestinal:** The most frequent type of adverse reaction occurring with Motrin is gastrointestinal (4% to 16%). This includes nausea,* epigastric pain,* heartburn,* diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness,* headache, nervousness. **Dermatologic:** Rash* (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

*Incidence 3% to 9%.

*Incidence less than 1 in 100*

**Gastrointestinal:** Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

*Causal relationship unknown*

**Gastrointestinal:** Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

**Overdosage:** In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

**Dosage and Administration:** Rheumatoid and osteoarthritis, including flares of chronic disease: Suggested dosage is 300, 400 or 600 mg t.i.d. or q.i.d.
Mild to moderate pain: 400 mg every 4 to 6 hours as necessary for relief of pain.

Do not exceed 2400 mg per day.

**Caution:** Federal law prohibits dispensing without prescription.

For additional product information, see your Upjohn representative or consult the package insert.

MED B-4-S

**Upjohn** THE UPJOHN COMPANY
Kalamazoo, Michigan 49001 USA

J-7280-4

August, 1979

# ALDORIL®

containing methyldopa and hydrochlorothiazide

TABLETS
**ALDORIL®-25**
containing 250 mg ALDOMET® (Methyldopa, MSD)
and 25 mg HydroDIURIL® (Hydrochlorothiazide, MSD)

TABLETS
**ALDORIL®-15**
containing 250 mg ALDOMET® (Methyldopa, MSD)
and 15 mg HydroDIURIL® (Hydrochlorothiazide, MSD)

TABLETS
**ALDORIL® D30**
containing 500 mg ALDOMET® (Methyldopa, MSD)
and 30 mg HydroDIURIL® (Hydrochlorothiazide, MSD)

TABLETS
**ALDORIL® D50**
containing 500 mg ALDOMET® (Methyldopa, MSD)
and 50 mg HydroDIURIL® (Hydrochlorothiazide, MSD)

Merck Sharp & Dohme, Division of
Merck & Co., Inc., West Point, PA 19486

MSD
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J9AR13

## Wanted: Physicians who prefer medicine to paperwork.

We are looking for dedicated physicians, physicians who want to be, not salesmen, accountants, and lawyers, but physicians. For such physicians, we offer a practice that is practically perfect, where in almost no time you experience a spectrum of cases some physicians do not encounter in a lifetime, where you work without worrying whether the patient can pay or you will be paid, and where you prescribe, not the least care, nor the most defensive care, but the best care.

If that is what you want, join the physicians who have joined the Army. Army Medicine is the perfect setting for the dedicated physician. Army Medicine provides wide-ranging opportunities for the student, the resident, and the practicing physician alike.

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**The practice that's practically all medicine.**

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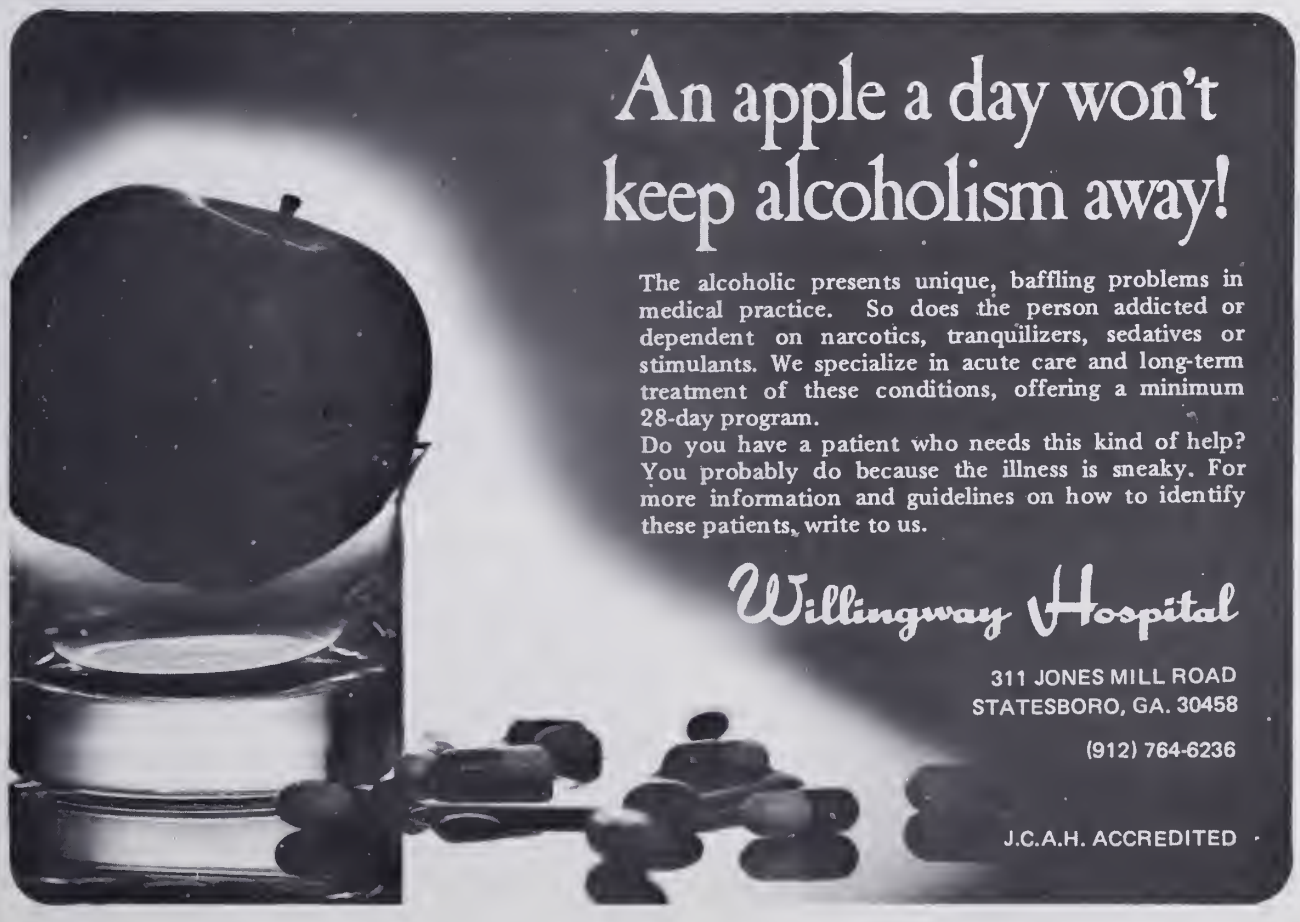

# The primary beneficiaries of ORAL HYDERGINE® TABLETS, 1 mg (1 tab t.i.d.)

Each 1 mg Hydergine tablet contains dihydroergocornine mesylate 0.333 mg, dihydroergocristine mesylate 0.333 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.333 mg, representing a total of 1 mg.

They're in their late sixties, the beneficiaries of more liberal retirement laws and more enlightened attitudes toward the elderly. They're leading socially productive lives. But recently, without any clear cause, they had each begun to experience mild episodes of symptoms such as confusion, mood-depression, and dizziness. Their ability to function could have been jeopardized. That's when they became the beneficiaries of oral Hydergine therapy.

## The still-functioning geriatric can benefit from Hydergine treatment

It is quite common for cognitive and emotional symptoms of deterioration to manifest gradually in the elderly. During this early stage, such symptoms are mild and more amenable to treatment. It is at this stage that Hydergine therapy has proved most effective. Patients tend to respond better, and with symptoms effectively relieved—or at least their progression retarded—the ability to function can be maintained.

## Oral Hydergine tablets promote better patient compliance

Compared with the sublingual form, dosage administration is easier, with less need for supervision.

**Contraindications:** Hypersensitivity to the drug.
**Precautions:** *Because the target symptoms are of unknown etiology, careful diagnosis should be attempted before prescribing Hydergine tablets and sublingual tablets.*
**Adverse Reactions:** Serious side effects have not been found. Some sublingual irritation, transient nausea, and gastric disturbances have been reported. Hydergine tablets and sublingual tablets do not possess the vasoconstrictor properties of natural ergot alkaloids.
**Dosage and Administration:** 1 mg three times daily. Alleviation of symptoms is usually gradual and results may not be observed for 3–4 weeks.
**How Supplied: Hydergine tablets (for oral use) 1 mg,** packages of 100 and 500. **Hydergine sublingual tablets 1 mg,** containing dihydroergocornine mesylate 0.333 mg, dihydroergocristine mesylate 0.333 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.333 mg, representing a total of 1 mg; packages of 100, 500, and 1000. **Hydergine sublingual tablets 0.5 mg,** containing dihydroergocornine mesylate 0.167 mg, dihydroergocristine mesylate 0.167 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.167 mg, representing a total of 0.5 mg; packages of 100 and 1000.
*Before prescribing, see package insert for full product information.*

SANDOZ PHARMACEUTICALS, EAST HANOVER, N.J. 07936

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SDZ 9-350

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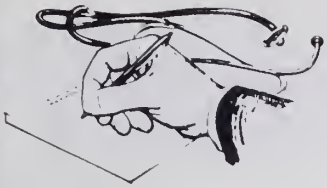

# Others Are Saying

## Mediation Panels

**Lee Fischer, M.D.**

By nature I am usually quite imperturbable, however, something happened the other day that really got me angry. The situation deals with something about which I wrote a few months ago. Your County Medical Society is having difficulty finding people to serve on Mediation Panels.

A few weeks ago I received a letter stating that I was to be an alternate physician member of a Mediation Panel. I would be asked to serve only if the physician originally chosen could not serve on the panel. I saw no reason to disqualify myself even though I had met the doctor involved in the malpractice case once or twice. I thought no more about it until I received another letter stating that the original doctor who was to serve on the panel disqualified himself. Supposedly this Mediation Panel was to meet for three full days. As I am in solo practice and have no partners to cover my office while I am gone, I was quite upset about spending three days serving on this Mediation Panel. I have served on a Mediation Panel in the past, however, it only took one half day. The experience was quite worthwhile and certainly helped the physician as the case was thrown out. However, giving up three days seemed to be asking a lot.

At that point I was only mildly upset but decided to find out why the original physician had disqualified himself from serving on this Mediation Panel. I called him and found out that the only reason he disqualified himself was because he did not want to give up his time to serve on the panel. To say the least I was quite indignant. This person had never served on a Mediation Panel and was also in a group of four or five physicians, yet he did not want to give up the time to serve on something as important as a Mediation Panel. He told me he was sorry that by disqualifying himself from the panel I got stuck and said essentially that that's the breaks of the ball game. So here I am, stuck serving on a Mediation Panel for three days. The same day all this was happening, I was repeating the story to one of my colleagues. He told me that in all probability if he were called for a Mediation Panel he would not serve on one either. At this point my mouth fell open as this individual has been a defendant in a malpractice case and had the benefit of an excellent physician serving on his Mediation Panel. It's the old story of, "I'll gladly reap the benefits but I won't give anything in return."

It's time we stopped giving these physicians a free ride. By state law service on Mediation Panels is purely voluntary. However, that does not mean that an organization such as the Palm Beach County Medical Society or PIMCO can not discipline its own members for failing to serve on these panels. This subject is to come up at the next Executive Committee meeting. I'm sure we would see a lot more physicians volunteering to serve on Mediation Panels if PIMCO were to raise Insurance Premiums of those physicians who had no excuse not to serve. Perhaps physicians unwilling to serve on Mediation Panels should lose their County Medical Society membership as they are certainly not helping the other members. There are various avenues to pursue to obtain more participation on Mediation Panels, and I do not profess to have any good single answer; however, one thing seems certain, and that is that the present system of voluntary service and blanket disqualification from service is not the answer. Disqualify yourself from service if you have a good, legitimate reason (the defendant is your brother-in-law or best friend, etc.) Otherwise when called to serve on Mediation Panels I urge you to do so. If you decline to serve on mine today, perhaps I'll decline to serve on yours tomorrow.

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Reprinted from the Palm Beach County Medical Bulletin, July 1979. Dr. Fischer is Editor of the Bulletin.

# The Maker

## Examining a Few Myths About Prescribing.

Increasing pressure is being put on the practicing physician to prescribe drugs generically. You are told that brand-name products are universally "expensive" and generic versions are relatively "cheap." To make this case, the most extreme (rather than typical) price differentials are cited. Thus, consumers are led to believe that such differentials are commonplace. Even your knowledge and your motives as a physician are questioned.

Understandably, these views have created myths. We think it's time to examine them in the light of all the facts and ramifications.

*MYTH: There are no differences in quality and performance between brand-name products and their generic counterparts. The corollary is that there are no differences among products made by high-technology, quality-conscious, research-based companies and those made by commodity-type suppliers.*

**FACT: The Food and Drug Administration does a good job in monitoring a generally excellent drug supply. Still, it has nowhere near the resources to guarantee the quality and bioavailability of all marketed products at any given time. Just a few months ago, for example, it noted that batches of tetracycline HCl capsules which met official monograph requirements were not bioequivalent to a reference product. As you know, there is substantial literature on this subject affecting many drugs, including such antibiotics as tetracycline and erythromycin. The record on drug recalls and court actions affirms strongly that there are differences among pharmaceutical companies and their products. Research-intensive companies have far better records than those that do no research and may practice minimum quality assurance.**

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*MYTH: Industry favors only "expensive" brand names and denigrates all generics.*

**FACT: PMA companies make 90 to 95 percent of the drug supply, including, therefore, most of the generics. Drug nomenclature is not the important point; it's the competence of the manufacturer and the integrity of the product that count.**

# Matters.

*MYTH: Generic options almost always exist.*

**FACT: About 55 percent of prescription drug expenditure is for single-source drugs. This means, of course, that for only 45 percent of such expenditure, is a generic prescribing option available.**

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*MYTH: Generic prescriptions are filled with inexpensive generics, thus saving consumers large sums of money.*

**FACT: Market data show that you invariably prescribe—and pharmacists dispense—both brand and generically labeled products from known and trusted sources, in the best interest of patients. In most cases the patient receives a proven brand product. Savings from voluntary or mandated generic prescribing are grossly exaggerated.**

*MYTH: Drugs account for a major portion of the rise in health care costs.*

**FACT: Drugs represent a very small part of such costs. The amount of the health care dollar spent for prescription drugs was about 12 cents in 1967; today it is about 8 cents. And you as a physician are most conscious of how drug therapy can cut hospitalization, avert surgery, reduce office visits and keep patients on the job.**

---

*MYTH: Government intrusions into the marketplace will save tax money.*

**FACT: Government schemes always cost the taxpayer something, and the costs often exceed the benefits. Certainly, any federal "help," such as lists of wholesale drug prices sent to all physicians and pharmacists, will be no exception. Just think of the expense of keeping them current! Moreover, wholesale prices are poor guides to actual transaction prices and even worse guides to retail prices.**

## The PMA Position

We believe your freedom to prescribe, either by generic or brand name, should be totally unabridged. Otherwise, your prescribing prerogatives and your relationships with patients will be seriously impaired.

## The maker does matter

After the myths about price and equivalency have been shattered, one fact stands out more clearly than ever: *The maker does matter.* As always, your best guide to drug therapy for your patients is to select products—both brands and generics—from manufacturers with credentials and performance records you have come to respect.

PMA

Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
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FAMILY PRACTITIONER OR INTERNIST wanted to share facilities with three practitioners in solo practice. Major equipment provided. Rent $250 per month. Competent laboratory and x-ray departments with income based on use. Bookkeeping system and receptionist shared. Contact: T. C. Kenaston Jr., M.D., P.O. Box 550, Cocoa, Florida 32922.

WANTED: Central Florida GP — regular or semiretired — supervise Physician Assistants in small health care facility. Excellent backup, no night or weekend calls. Contact L.C. Taylor, M.D., 320 Parkview Place, Lakeland, Florida 33801. Phone (813) 682-4913.

CENTRAL FLORIDA multispecialty group has opening for fourth general practitioner. Excellent financial opportunity; new well equipped office near three hospitals. Write C-945, P.O. Box 2411, Jacksonville, Florida 32203.

## SPECIALISTS

MULTISPECIALTY GROUP OF PHYSICIANS located in North Florida seeking to expand in the following specialties: Rheumatology, Gastroenterology, Hematology/Oncology, Endocrinology, and Infectious Diseases. Please send curriculum vitae to: C-928, P.O. Box 2411, Jacksonville, Florida 32203.

EMERGENCY PHYSICIANS for position with young expanding group. Liberal salary package. Send CV to I. Bloomfield, M.D., Medical Director, P.O. Box 160132 Snapper Creek Station, Miami, Florida 33116 or call (305) 596-2896.

ORTHOPEDIST — Excellent opportunity for the right man in twenty physician multispecialty group in beautiful Northwest Florida beach community. Immediate incentive compensation plan with guarantee leading to full partnership. No investment required. Ideal practice setting in new building located directly across the street from new modern hospital. Contact: Theodore D. Rahe, Administrator, White-Wilson Medical Center, Fort Walton Beach, Florida 32548. (904) 863-4121.

EMERGENCY DEPARTMENT PHYSICIANS, P.A., John F. Davison, M.D. has six full time positions in Emergency Medicine available in Alabama and Florida. Requirements: 1. Alabama and/or Florida current license. 2. ACLS certified. 3. Family or Internal Medicine Board eligibility or certification with a minimum of one year full time experience in Emergency Medicine or ABEM requirements to take board in Emergency Medicine. Salary and fringes negotiable. Starting date on or about September 15, 1979. Send CV and request for further information to P.O. Box 546, Miami, Florida 33156.

CARDIOLOGIST NEEDED: Established cardiologist in multispecialty group needs aggressive Board Certified or Board Eligible associate to join large practice in Coral Springs, one of the fastest growing communities in Florida. Please send CV to Coral Springs Medical Group, 9441 West Sample Road, Coral Springs, Florida 33065.

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LARGO MEDICAL CENTER is expanding its staff of specialties. In growing area. Florida license required. For interview call Andrew R. Mena, Administrator between 3-7 p.m. at (813) 391-0531 or send resume to P.O. Box 1091, Clearwater, Florida 33517.

CARDIOLOGIST, part time, Miami Beach multispecialty group, (305) 587-0440.

INTERNIST, RHEUMATOLOGIST AND NEUROSURGEON wanted to associate with an expanding established group of individually incorporated physicians on the North Florida Gulf Coast. An excellent opportunity for persons who want to run their own practice and live on the coast without the problems of a large city. Write C-947, P.O. Box 2411, Jacksonville, Florida 32203.

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## MISCELLANEOUS

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ORLANDO, FLORIDA — Enjoy the Florida sunshine. Excellent gross which could be easily increased. Sale price includes furniture, equipment, files and the advantage of stepping into an ongoing producing practice (office lease, phone book listing, my excellent secretary if desired, etc.). Call E. A. Herrera, M.D., evenings (305) 862-7692.

### Equipment

FOR SALE — Olympus fiberoptic bronchoscope. Used two times. All attachments. Excellent condition. Marked savings. Contact L.C. Taylor, M.D., 320 Parkview Place, Lakeland, Florida 33801. Phone (813) 682-4913.

FOR SALE — Gas Analyzer Radiometer BMS 3 MK 2 Blood Microsystem with PMB 72 MK ?. Excellent condition. Bio-Dynamics/FMC Celltrack, no use since complete renovation by manufacturer. Collins 13.5 liter Respirometer, in good working condition. Also Collins Residual Volume Apparatus with Helium and Infrayed Analyzer, as is. Two Travenolrenal Dialysis Units with pumps, one unit equipped with Heme-Alect System. Bucher Ultrasound Unit Model 115 Megason, XV, unused. Ohio 842 Spirometer with Nitrogen Analyzer which is equipped with an Ohio 1200 Normal Value Indicator. For further details, phone (813) 382-1039.

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FLORIDA — (SOUTHEAST) — DELRAY: Offices for lease in single story medical plaza adjacent to Interstate-95; busy intersection and newly built convalescent center; tremendous opportunity to grow with a rapidly growing middle class community of single-family and condominium dwellings. Contact: Lawrence M. Landis, 900 S. Congress Ave., Delray, Florida 33445. Phone: (305) 278-0062.

JACKSONVILLE. 1,500 square feet, medically designed office available in newly refurbished Shops of Sherwood (northwest area of Jacksonville). A/C, ample parking. Located in stable, middle income residential community which needs medical doctor. Ideal for growing practice. Some equipment available. Start at $250 per month. Call collect (305) 446-4284.

BREVARD COUNTY (Cape Kennedy Area). Several outstanding office suites for lease and/or sale in Cocoa, Cocoa Beach, Titusville, and Melbourne. Can be tailored to individual or clinical needs. Contact: Trend Realty, Inc. Realtors, P. O. Box 39, Cocoa Beach, Florida 32931. Attention: Dudley Hain, Realtor-Associate, (305) 783-8686.

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**Contraindications:** Tablets in children under 6 months of age; known hypersensitivity; acute narrow angle glaucoma, may be used in patients with open angle glaucoma who are receiving appropriate therapy

**Warnings:** As with most CNS-acting drugs, caution against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Withdrawal symptoms (similar to those with barbiturates, alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal/muscle cramps, vomiting, sweating). Keep addiction-prone individuals (drug addicts or alcoholics) under careful surveillance because of predisposition to habituation/dependence.

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations, as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

ORAL Advise patients against simultaneous ingestion of alcohol and other CNS depressants.

Not of value in treatment of psychotic patients, should not be employed in lieu of appropriate treatment. When using oral form adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increase in dosage of standard anticonvulsant medication; abrupt withdrawal in such cases may be associated with temporary increase in frequency and/or severity of seizures.

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Withdrawal symptoms (similar to those with barbiturates, alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal/muscle cramps, vomiting, sweating). Keep addiction-prone individuals under careful surveillance because of predisposition to habituation/dependence. Not recommended for OB use

Efficacy/safety not established in neonates (age 30 days or less); prolonged CNS depression observed. In children, give slowly (up to 0.25 mg/kg over 3 minutes) to avoid apnea or prolonged somnolence, can be repeated after 15 to 30 minutes. If no relief after third administration, appropriate adjunctive therapy is recommended

**Precautions:** If combined with other psychotropics or anticonvulsants, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of Valium (diazepam), *i.e.*, phenothiazines, narcotics, barbiturates, MAO inhibitors and antidepressants. Protective measures indicated in highly anxious patients with accompanying depression who may have suicidal tendencies. Observe usual precautions in impaired hepatic function, avoid accumulation in patients with compromised kidney function. Limit oral dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation (initially 2 to 2½ mg once or twice daily, increasing gradually as needed or tolerated).

INJECTABLE Although promptly controlled, seizures may return; readminister if necessary, not recommended for long-term maintenance therapy. Laryngospasm/increased cough reflex are possible during peroral endoscopic procedures, use topical anesthetic, have necessary countermeasures available. Hypotension or muscular weakness possible, particularly when used with narcotics, barbiturates or alcohol. Use lower doses (2 to 5 mg) for elderly/debilitated

**Adverse Reactions:** Side effects most commonly reported were drowsiness, fatigue, ataxia. Infrequently encountered were confusion, constipation, depression, diplopia, dysarthria, headache, hypotension, incontinence, jaundice, changes in libido, nausea, changes in salivation, skin rash, slurred speech, tremor, urinary retention, vertigo, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances and stimulation have been reported, should these occur, discontinue drug

Because of isolated reports of neutropenia and jaundice, periodic blood counts, liver function tests advisable during long-term therapy. Minor changes in EEG patterns, usually low-voltage fast activity, have been observed in patients during and after Valium (diazepam) therapy and are of no known significance

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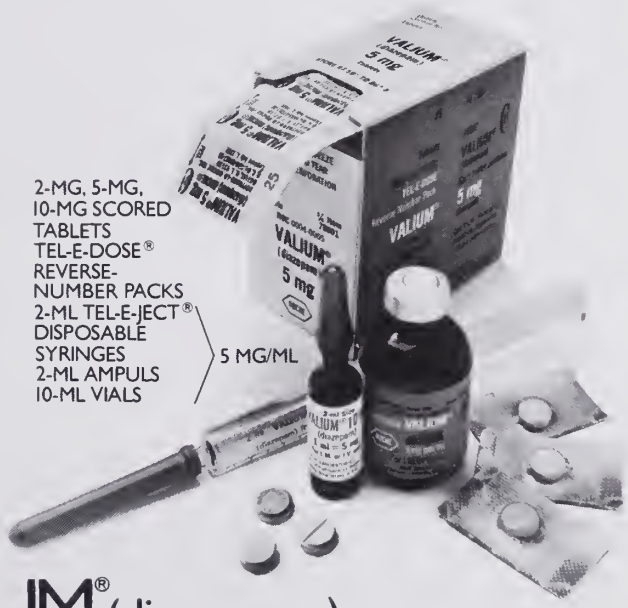


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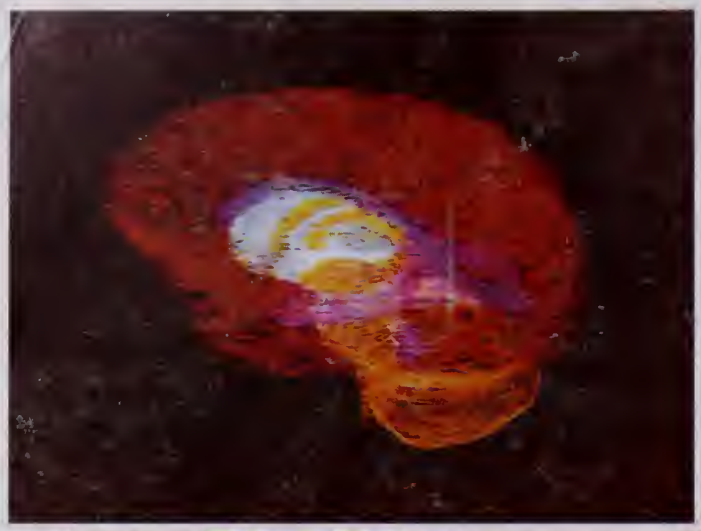

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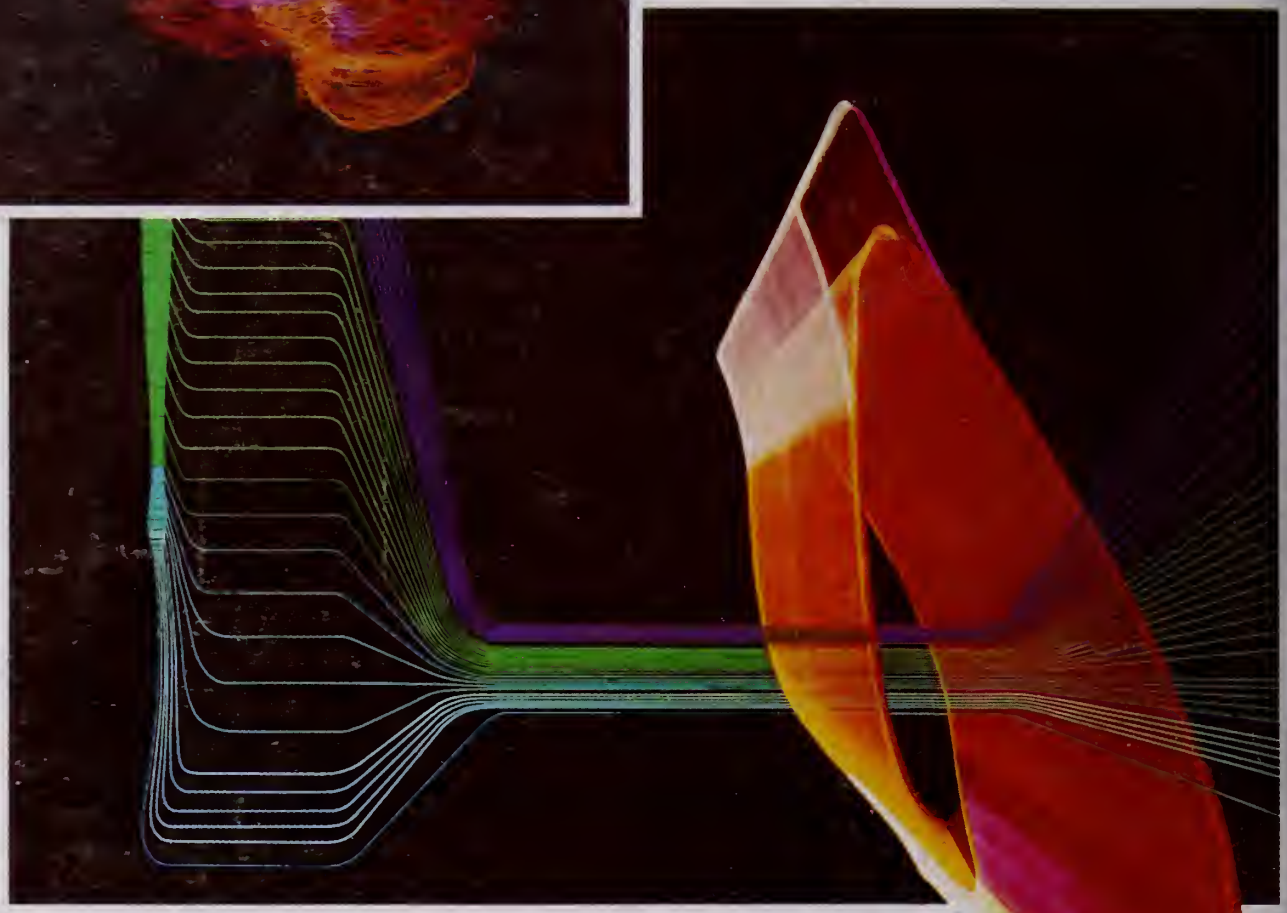

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**Contraindicated:** Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

**Warnings:** Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

**Precautions:** If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

**Side Effects:** Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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Beach scene at sunset. Photograph by O. Frank Agee, M.D., of Gainesville.

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# President's Page

## HRS Reorganization

In 1975 the state legislature in a well intentioned move mandated a reorganization of the Florida Department of Health and Rehabilitative Services. This legislation was predicated on the generally accepted concept that smaller locally administered units of government are more effective and in touch with citizens needs than massive centristic bureaucracies. Additionally the HRS structure at the time was less a consolidated health and social service agency than a group of agencies reporting to a coordinating and fiscal director.

The goal of the clever '75 act was achieved with a high degree of overkill. Local administration with variable competence was achieved in 11 HRS districts throughout the state. In these districts, however, with the absence of strong central direction professionalism in programs declined. Professional leadership in programs such as mental health, retardation, public health and children's medical services is difficult to duplicate in an equivalent manner eleven times.

In the law the Secretary of the department has the responsibility to maintain program direction and quality. In order to allow the Secretary to accomplish this the law establishes a series of program offices to advise the Secretary. These offices, however, are without line authority and the accompanying staff to keep in touch with day to day operations throughout the state. As a result they are in a poor position to provide or offer real program direction.

The result of all this has been a serious decline in the professional quality of programs at all levels. Interestingly enough there is no direction in which an accusing finger can be pointed.

HRS District Administrators within the salary limitations cannot secure the personnel needed to provide the professional supervision required. These same D.A.'s must somehow work out their arrangements with county health departments which are basically county controlled and funded. Social services must be provided primarily through local private contractors — a real plus except the Administrator loses the flexibility that direct control of staffing provides.

The bottom line in this muddled structure is decreased client service. Were it not for the system of local private agency contracts, HRS services would be virtually non existent except for institutional programs.

The question then arises; who is to blame? As indicated earlier — no one. The theory of the '75 organization is sound. The funding while not lavish should be, at least, adequate, but not enough to buy real professional leadership at the local level.

The answer, it would appear, would be to recreate professionally supervised line agencies at the state level — with client intake and control maintained at the district or local level. This was the plan originally devised by the House of Representatives Committees in consultation with the management firm of Booz, Allen and Hamilton in 1969.

The HSA districts should remain as they are. Welfare supervision, aging programs, child protective services which include foster care, child abuse and some juvenile programs should be locally supervised. Vocational rehabilitation which is essentially an intake, referral and tracking system should under the limits of Federal law remain in local control.

The professional services such as retardation, mental health, children's medical services and public health and its attendant programs would fare much better with state professional line control over local services.

The way to keep those professional programs more responsible at the local level might be to place all state and county health programs under an elected county health board. This board would manage all publicly operated health and health related programs in the county much as the school board manages local public school education. Funds would be matched state and local as in school programs. The state with its professional leaders would establish guidelines, standards and program review in much the same manner as the Department of Education oversees local school programs.

Formula state-local funding for indigent health and public health would guarantee equality of program level. It would assure uniform eligibility for indigent health care and also assure county to county reimbursement for services when patients cross county lines.

Maybe there's no way to efficiently organize social service agencies. If not we at least ought not to destroy those professional programs that have the capacity to give the taxpayer something for his money. Today, in Florida, however, in our attempt to rescue the unfortunate social service client from bureaucratic suffocation we have poisoned the well of public professionalism which should be available for all of us.

Richard Hodes

---


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**Dosage and Administration:** Average initial dose is 100 mg to 300 mg q12h depending on the age and weight of the patient and the severity of the disease. See package insert for full prescribing information.

*See following page for a brief summary of prescribing information.*

**KEY PHARMACEUTICALS, INC.**
Miami, Florida 33169 (USA)

# THEO-DUR™

## Enduring Action Anhydrous Theophylline

### Sustained Action Tablets

**Description:** THEO-DUR Sustained Action Tablets contain anhydrous theophylline, with no color additives.

**Actions:** The pharmacologic actions of theophylline are as a bronchodilator, pulmonary vasodilator and smooth muscle relaxant since the drug directly relaxes the smooth muscle of the bronchial airways and pulmonary blood vessels. Theophylline also possesses other actions typical of the xanthine derivatives: coronary vasodilator, diuretic, cardiac stimulant, cerebral stimulant and skeletal muscle stimulant. The actions of theophylline may be mediated through inhibition of phosphodiesterase and a resultant increase in intracellular cyclic AMP which could mediate smooth muscle relaxation.

**Indications:** Symptomatic relief and/or prevention of asthma and reversible bronchospasm associated with chronic bronchitis and emphysema.

**Contraindications:** THEO-DUR is contraindicated in individuals who have shown hypersensitivity to any of its components or xanthine derivatives.

**Warnings:** Excessive theophylline doses may be associated with toxicity; serum theophylline levels should be monitored to assure maximum benefit with minimum risk. Incidence of toxicity increases at serum levels greater than 20 mcg/ml. High blood levels of theophylline resulting from conventional doses are correlated with clinical manifestations of toxicity in: patients with lowered body plasma clearances, patients with liver dysfunction or chronic obstructive lung disease, and patients who are older than 55 years of age, particularly males. There are often no early signs of less serious theophylline toxicity such as nausea and restlessness, which may appear in up to 50% of patients prior to onset of convulsions. Ventricular arrhythmias or seizures may be the first signs of toxicity.

Many patients who have higher theophylline serum levels exhibit a tachycardia. Theophylline products may worsen pre-existing arrhythmias.

**Usage in Pregnancy:** Safe use in pregnancy has not been established relative to possible adverse effects on fetal development, but neither have adverse effects on fetal development been established. This is, unfortunately, true for most anti-asthmatic medications. Therefore, use of theophylline in pregnant women should be balanced against the risk of uncontrolled asthma.

**Precautions:** THEO-DUR TABLETS SHOULD NOT BE CHEWED OR CRUSHED. Theophyllines should not be administered concurrently with other xanthine medications. It should be used with caution in patients with severe cardiac disease, severe hypoxemia, hypertension, hyperthyroidism, acute myocardial injury, cor pulmonale, congestive heart failure, liver disease and in the elderly, particularly males, and in neonates. Great caution should be used in giving theophylline to patients in congestive heart failure since these patients show markedly prolonged theophylline blood level curves. Use theophylline cautiously in patients with history of peptic ulcer. Theophylline may occasionally act as a local irritant to G.I. tract although gastrointestinal symptoms are more commonly central and associated with high serum concentrations above 20 mcg/ml.

**Adverse Reactions:** The most consistent adverse reactions are usually due to overdose and are:

Gastrointestinal: Nausea, vomiting, epigastric pain, hematemesis, diarrhea.

Central Nervous System: Headaches, irritability, restlessness, insomnia, reflex hyperexcitability, muscle twitching, clonic and tonic generalized convulsions.

Cardiovascular: Palpitation, tachycardia, extrasystoles, flushing, hypotension, circulatory failure, life threatening ventricular arrhythmias.

Respiratory: Tachypnea.

Renal: Albuminuria, increased excretion of renal tubular cells and red blood cells; potentiation of diuresis.

Others: Hyperglycemia and inappropriate ADH syndrome.

**How Supplied:** THEO-DUR 100 mg, 200 mg and 300 mg Sustained Action Tablets are available in bottles of 100, 1000, and 5000, and in unit dose packages of 100 (20 x 5's).

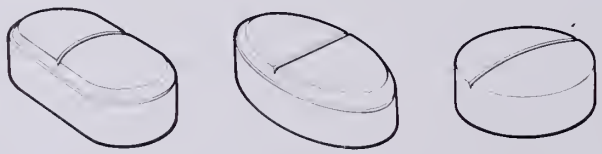
**Caution:** FEDERAL LAW PROHIBITS DISPENSING WITHOUT A PRESCRIPTION.

*For full prescribing information, see package insert.* 0779

# ZERO-ORDER

## dc/dt=K™

## (Constant rate absorption by GI infusion)



300 mg 200 mg 100 mg

**KEY PHARMACEUTICALS, INC.**
Miami, Florida 33169 (USA)

**Brief Summary of Prescribing Information**

**Indications and Usage:** Symptomatic relief of anxiety, tension, agitation, irritability insomnia associated with anxiety neuroses and transient situational disturbances; an associated with depressive symptoms and as a treatment of symptoms of anxiety if such sy toms are a significant feature of functional or organic disorders, particularly gastrointestin cardiovascular

Effectiveness in long-term use, i e , more than 4 months, has not been assessed by syst atic clinical studies Reassess periodically usefulness of the drug for the individual patient

**Contraindications:** Known sensitivity to benzodiazepines or acute narrow-angle glaucom

**Warnings:** Not recommended in primary depressive disorders or psychoses As with all C acting drugs, warn patients on lorazepam not to operate machinery or motor vehicles, an diminished tolerance for alcohol and other CNS depressants

Physical and Psychological Dependence Withdrawal symptoms like those noted with ba turates and alcohol have occurred following abrupt discontinuance of benzodiazep (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating) Ac tion-prone individuals, e g drug addicts and alcoholics, should be under careful surveilla when on benzodiazepines because of their predisposition to habituation and depende Withdrawal symptoms have also been reported following abrupt discontinuance of benz azepines taken continuously at therapeutic levels for several months

**Precautions:** In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid c sedation

Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may resu symptoms like those being treated anxiety, agitation, irritability, tension, insomnia and o sional convulsions

Observe usual precautions with impaired renal or hepatic function.

Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that loraze has not been shown of significant benefit in treating gastrointestinal or cardiovascular con nent

Esophageal dilation occurred in rats treated with lorazepam for more than 1 yea 6mg kg day No effect dose was 1 25mg/kg/day (approximately 6 times the maximum hu therapeutic dose of 10mg day) Effect was reversible only when treatment was withdrawn w 2 months of first observation Clinical significance is unknown, but use of lorazepam for longed periods and in geriatric patients requires caution and frequent monitoring for sympt of upper G I disease

Safety and effectiveness in children under 12 years have not been established

ESSENTIAL LABORATORY TESTS Some patients have developed leukopenia, some have elevations of LDH As with other benzodiazepines, periodic blood counts and liver function are recommended during long-term therapy

CLINICALLY SIGNIFICANT DRUG INTERACTIONS: Benzodiazepines produce CNS depres effects when administered with such medications as barbiturates or alcohol.

CARCINOGENESIS AND MUTAGENESIS: No evidence of carcinogenic potential emerge rats during an 18-month study No studies regarding mutagenesis have been performed.

PREGNANCY Reproductive studies were performed in mice, rats, and 2 strains of rab Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastrosch malformed skull and microphthalmia) were seen in drug-treated rabbits without relationsh dosage Although all these anomalies were not present in the concurrent control group, have been reported to occur randomly in historical controls At 40mg/kg and higher, there evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lo doses Clinical significance of these findings is not known However, increased risk of cong tal malformations associated with use of minor tranquilizers (chlordiazepoxide, diazepam meprobamate) during first trimester of pregnancy has been suggested in several stu Because use of these drugs is rarely a matter of urgency, use of lorazepam during this pe should almost always be avoided Possibility that a woman of child-bearing potential ma pregnant at institution of therapy should be considered. Advise patients if they become p nant to communicate with their physician about desirability of discontinuing the drug

In humans, blood levels from umbilical cord blood indicate placental transfer of loraze and its glucuronide

NURSING MOTHERS It is not known if oral lorazepam is excreted in human milk like c benzodiazepines As a general rule, nursing should not be undertaken while on a drug s many drugs are excreted in milk

**Adverse Reactions,** if they occur, are usually observed at beginning of therapy and gene disappear on continued medication or on decreasing dose In a sample of about 3,500 anx patients, most frequent adverse reaction is sedation (15 9%), followed by dizziness (6 weakness (4 2%) and unsteadiness (3 4%) Less frequent are disorientation, depression, sea change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, function disturbance, various gastrointestinal symptoms and autonomic manifestations dence of sedation and unsteadiness increased with age Small decreases in blood pres have been noted but are not clinically significant, probably being related to relief of anxiety

**Overdosage:** In management of overdosage with any drug, bear in mind that multiple ag may have been taken Manifestations of overdosage include somnolence, confusion and co Induce vomiting and/or undertake gastric lavage followed by general supportive care, mon ing of vital signs and close observation Hypotension, though unlikely, usually may be contro with Levarterenol Bitartrate Injection U S P Usefulness of dialysis has not been determined

# Ativan® IV for (lorazepam) Anxiety

***Dosage:*** **Individualize for maximum beneficial effects. Increase do gradually when needed, giving higher evening dose before increas daytime doses. Anxiety, usually 2-3mg/day given b.i.d. or t.i.d.; dosa may vary from 1 to 10mg/day in divided doses. For elderly or deb tated, initially 1-2mg/day; insomnia due to anxiety or transient sit tional stress, 2-4mg h.s.**

***How Supplied:*** **0.5, 1.0 and 2.0mg tablets.**

**Wyeth Laboratories**
Philadelphia, PA 19101

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# Why one benzodiazepine and not another?

Are you concerned about long-acting metabolites? Many clinicians, as well as pharmacologists, are beginning to draw attention to this problem (see New England Journal of Medicine, April 5, 1979).

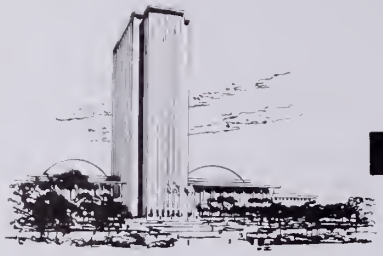
In contrast to some older benzodiazepines, Ativan (lorazepam) does not give rise to long-lasting active metabolites. As with all benzodiazepines, you should follow the usual precautions concerning co-administration with other CNS depressants and warn your patients against operating dangerous machinery and motor vehicles.

However, it is noteworthy that Ativan showed no clinical evidence of accumulation even when given in high doses over periods up to 6 months. The half-life of free lorazepam is about 12 hours; steady-state serum levels are attained in 2-3 days. Comparable data for diazepam: 20-50 hours and at least 7-10 days. (The pharmacokinetic profile of a drug can define such characteristics as absorption, distribution, metabolism and elimination but cannot, at present, be directly related to its therapeutic effectiveness.)

Ativan has a convenient b.i.d. or t.i.d. dosage schedule; it is compatible with a long list of other medications and, of course, it is a highly effective anxiolytic agent, as established in numerous nationwide, double-blind, controlled evaluations in thousands of patients.

See important information on preceding page.

**Ativan**® CIV
**for** (lorazepam)
**Anxiety**



# LEGISLATIVE NEWS

The 1979 Florida Legislature enacted several bills of both direct and indirect interest to physicians of the State. The following summary of some of these new laws was prepared by the FMA Capital Office and Legal Counsel:

### Medical Practice Act

A new Medical Practice Act (Chapter 458, Florida Statutes) was adopted effective July 1, 1979. The Act creates a Board of Medical Examiners, composed of nine physicians and two lay members, and places the Board under the jurisdiction of the newly created Department of Professional Regulation. The Department of Professional Regulation is now responsible for functions such as preparation of examinations, licensing, discipline, etc., that have in the past been delegated to the individual professional boards.

The new Act sets forth in great detail those activities for which a physician may be subjected to disciplinary action, including revocation or suspension of license.

Chapter 458 now provides that a physician who accepts a license to practice in the State thereby consents, during a lawful investigation, to render a handwriting sample and to authorize the release of all medical records pertaining to his mental or physical condition. Provision is also made for subpoenas and search warrants directed at physicians under specified circumstances.

The new law requires establishment of a procedure for biennial renewal of licenses and calls for the adoption of rules governing disposition of records of deceased practitioners.

The 1979 legislation enacted provisions encouraging the more effective utilization of physician assistants.

Copies of the entire Medical Practice Act may be obtained from the Board of Medical Examiners, Oakland Building, Suite 220, 2009 Apalachee Parkway, Tallahassee, Florida 32301.

### Nurse Practice Act (HB 1803)

The most significant changes within the Nurse Practice Act relate to the role of the Advanced Registered Nurse Practitioner.

Within the definition of "advanced or specialized nursing practice", the role of the joint committee of the Boards of Nursing and Medical Examiners is clearly defined. Medical acts which may be approved by the joint committee will be performed under general supervision within the framework of standing protocols, unless the committee specifically states otherwise. An additional member was added to the joint committee giving it the following composition:

- 3 members from the Board of Nursing
- 3 members from the Board of Medical Examiners
- The Secretary or his designee of the Department of Professional Regulation

Specific functions for certain classes of nurse pracititioners are delineated, all of which require protocols and the maintenance of supervision for directing the specific course of medical treatment by a physician, osteopath or dentist. Any additional functions would have to be approved by the joint committee.

These provisions would appear to greatly clarify the role of the advanced registered nurse practitioner and the authority of the joint committee.

*(To Be Continued Next Month)*

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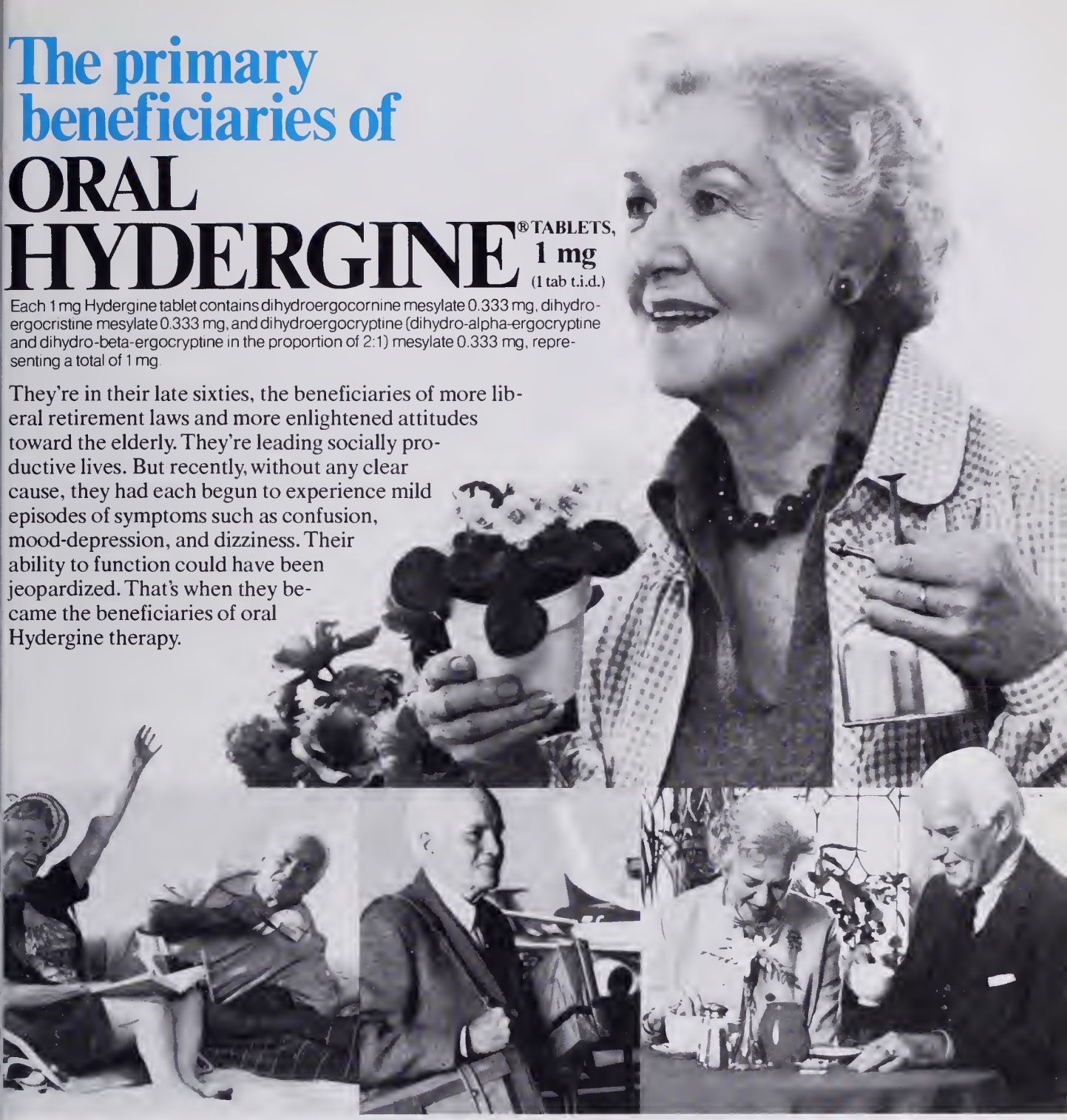
**The best way to show that a stick is crooked is not to argue about it, or spend your time denouncing it, but to lay a straight stick alongside of it.**

**Dwight Moody**

# The primary beneficiaries of ORAL HYDERGINE® TABLETS, 1 mg (1 tab t.i.d.)

Each 1 mg Hydergine tablet contains dihydroergocornine mesylate 0.333 mg, dihydroergocristine mesylate 0.333 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.333 mg, representing a total of 1 mg.

They're in their late sixties, the beneficiaries of more liberal retirement laws and more enlightened attitudes toward the elderly. They're leading socially productive lives. But recently, without any clear cause, they had each begun to experience mild episodes of symptoms such as confusion, mood-depression, and dizziness. Their ability to function could have been jeopardized. That's when they became the beneficiaries of oral Hydergine therapy.



## The still-functioning geriatric can benefit from Hydergine treatment

It is quite common for cognitive and emotional symptoms of deterioration to manifest gradually in the elderly. During this early stage, such symptoms are mild and more amenable to treatment. It is at this stage that Hydergine therapy has proved most effective. Patients tend to respond better, and with symptoms effectively relieved—or at least their progression retarded—the ability to function can be maintained.

## Oral Hydergine tablets promote better patient compliance

Compared with the sublingual form, dosage administration is easier, with less need for supervision.

**Contraindications:** Hypersensitivity to the drug.
**Precautions:** *Because the target symptoms are of unknown etiology, careful diagnosis should be attempted before prescribing Hydergine tablets and sublingual tablets.*
**Adverse Reactions:** Serious side effects have not been found. Some sublingual irritation, transient nausea, and gastric disturbances have been reported. Hydergine tablets and sublingual tablets do not possess the vasoconstrictor properties of natural ergot alkaloids.
**Dosage and Administration:** 1 mg three times daily. Alleviation of symptoms is usually gradual and results may not be observed for 3–4 weeks.
**How Supplied: Hydergine tablets (for oral use) 1 mg,** packages of 100 and 500. **Hydergine sublingual tablets 1 mg,** containing dihydroergocornine mesylate 0.333 mg, dihydroergocristine mesylate 0.333 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.333 mg, representing a total of 1 mg, packages of 100, 500, and 1000. **Hydergine sublingual tablets 0.5 mg,** containing dihydroergocornine mesylate 0.167 mg, dihydroergocristine mesylate 0.167 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.167 mg, representing a total of 0.5 mg; packages of 100 and 1000.
*Before prescribing, see package insert for full product information.*

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**DECEMBER 5, 1979**

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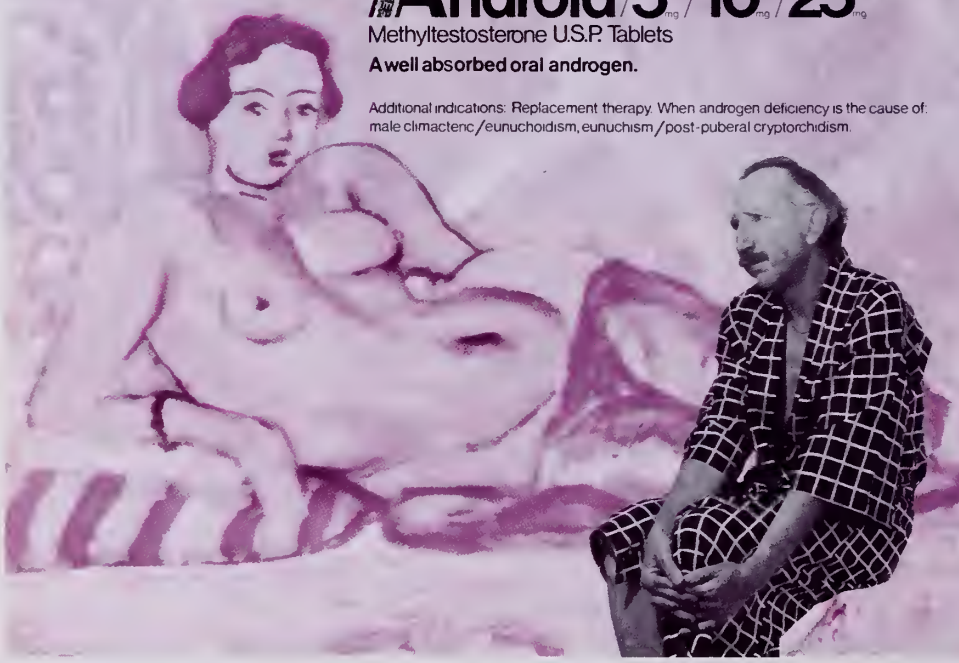
When
**impotence**
is due to androgenic deficiency.

**Android® 5 Buccal/10 Oral/25 Oral mg**

Methyltestosterone U.S.P. Tablets

**A well absorbed oral androgen.**

Additional indications: Replacement therapy. When androgen deficiency is the cause of: male climacteric/eunuchoidism, eunuchism/post-puberal cryptorchidism.



**DESCRIPTION:** Methyltestosterone is 17β-Hydroxy-17-Methylandrost-4-en-3-one. **ACTIONS:** Methyltestosterone is an oil soluble androgenic hormone. **INDICATIONS:** In the male: 1. Eunuchoidism and eunichism. 2. Male climacteric symptoms when these are secondary to androgen deficiency 3. Impotence due to androgenic deficiency 4. Post-puberal cryptochidism with evidence of hypogonadism. Cholestatic hepatitis with jaundice and altered liver function tests, such as increased BSP retention, and rises in SGOT levels, have been reported after Methyltestosterone. These changes appear to be related to dosage of the drug. Therefore, in the presence of any changes in liver function tests, drug should be discontinued. **PRECAUTIONS:** Prolonged dosage of androgen may result in sodium and fluid retention. This may present a problem, especially in patients with compromised cardiac reserve or renal disease. In treating males for symptoms of climacteric, avoid stimulation to the point of increasing the nervous, mental, and physical activities beyond the patient's cardiovascular capacity. **CONTRAINDICATIONS:** Contraindicated in persons with known or suspected carcinoma of the prostate and in carcinoma of the male breast. Contraindicated in the presence of severe liver damage. **WARNINGS:** If priapism or other signs of excessive sexual stimulation develop, discontinue therapy. In the male, prolonged administration or excessive dosage may cause inhibition of testicular function, with resultant oligospermia and decrease in ejaculatory volume. Use cautiously in young boys to avoid premature epiphyseal closure or precocious sexual development. Hypersensitivity and gynecomastia may occur rarely. PBI may be decreased in patients taking androgens. Hypercalcemia may occur, particularly during therapy for metastatic breast carcinoma. If this occurs, the drug should be discontinued. **ADVERSE REACTIONS:** Cholestatic jaundice • Oligospermia and decreased ejaculatory volume • Hypercalcemia particularly in patients with metastatic breast carcinoma. This usually indicates progression of bone metastases • Sodium and water retention • Priapism • Virilization in female patients • Hypersensitivity and gynecomastia. **DOSAGE AND ADMINISTRATION:** Dosage must be strictly individualized, as patients vary widely in requirements. Daily requirements are best administered in divided doses. The following is suggested as an average daily dosage guide. **In the male:** Eunuchoidism and eunuchism, 10 to 40 mg. Male climacteric symptoms and impotence due to androgen deficiency, 10 to 40 mg. Postpuberal cryptorchism, 30 mg. **REFERENCE:** R. B. Greenblatt, M.D., R. Witherington, M.D., I. B. Sipahioglu, M.D. Hormones for Improved Sexuality in the Male and the Female Climacteric. *Drug Therapy*, Sept. 1976. **SUPPLIED:** 5, 10, 25 mg. in bottles of 60, 250. Rx only.

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Leon O. Jacobson, MD

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**Sunday, March 9, 1980** **HYPERTENSION SEMINAR.** *Chairman:* John H. Laragh, MD, Cornell Medical Center, New York. *Speakers:* John H. Laragh, MD (New York); Frank A. Finnerty, Jr., MD (Washington, D.C.); Ray W. Gifford, Jr., MD (Cleveland); Francesco del Greco, MD (Chicago); Thomas A. Kieth,III, MD (Cincinnati); David T. Lowenthal, MD (Philadelphia); Colman Ryan, MD (San Francisco); and Robert C. Tarazi, MD (Cleveland).

**Monday, March 10, 1980** **WHAT'S NEW IN MEDICINE? SEMINAR.** *Chairman:* Michael E. DeBakey, MD Baylor College of Medicine, Houston. *Speakers:* Michael E. DeBakey, MD (Houston); Marco Caine, MD (Jerusalem, Israel); Frank H. DeLand, MD (Lexington, Ky.); Bernard F. Germain, MD (Tampa); David L. Horwitz, MD (Chicago); Ruth Jackson, MD (Dallas); Leon O. Jacobson, MD (Chicago); Alfred S. Ketcham, MD (Miami); George R. Prout, Jr., MD (Boston); Ronald J. Scott, MD (Fort Lauderdale); James I. Tennenbaum, MD (Columbus, OH.); C. Craig Tisher, MD (Durham); and Harrison D. Willcutts, MD (West Springfield, MA.).

**Tuesday, March 11, 1980** **DIGESTIVE DISEASES SEMINAR.** *Chairman:* Arvey I. Rogers, MD, University of Miami. *Speakers:* Arvey I. Rogers, MD (Miami); Martin Kalser, MD (Miami); Joe U. Levi, MD (Miami); Eugene Schiff, MD (Miami); Leon Schiff, MD (Miami); and Elliot Weser, MD (San Antonio).

**Wednesday, March 12, 1980** **CANCER SEMINAR.** *Chairman:* R. Lee Clark, MD (University of Texas System Cancer Center, Houston. *Speakers:* R. Lee Clark, MD (Houston); Roy Ashikari, MD (New York); Hugh R.K. Barber, MD (New York); Albert Bothe, Jr., MD (Boston); Frank H. DeLand, MD (Lexington, KY.); Philip R. Exelby, MD (New York); Victor Fazio, MD (Cleveland); Alfred S. Ketcham, MD (Miami); Gerald P. Murphy, MD (Buffalo); George R. Prout, Jr., MD (Boston); and Charles L. Vogel, MD (Miami).

**Thursday, March 13, 1980** **UROLOGY SEMINAR.** *Chairman:* George R. Prout, Jr., MD, Harvard Medical School, Boston. *Speakers:* George R. Prout, Jr., MD (Boston); Marco Caine, MD (Jerusalem, Israel); Robert Krane, MD (Boston); Edwin M. Meares, Jr., MD (Boston); Frederick K. Merkel, MD (Chicago); Gerald P. Murphy, MD (Buffalo); Thomas J. Rohner, Jr., MD (Hershey, PA.): and Robert H. Rubin, MD (Boston).

**Friday, March 14, 1980** **NUTRITION/HYPERALIMENTATION SEMINAR.** *Chairman:* George L. Blackburn, MD, PhD, Harvard Medical School, Boston. *Speakers:* George L. Blackburn, MD, PhD (Boston); Bruce R. Bistrian, MD, PhD (Boston); Johan Bjorksten, PhD (Madison, WI.); Albert Bothe, MD (Boston); David L. Horwitz, MD, PhD (Chicago); Herbert P. Sarett, PhD (Evansville, IN); Philip L. White, ScD (Chicago); Harrison D. Willcutts, MD (West Springfield, MA.).

**Saturday, March 15, 1980** **COSMETIC SURGERY SEMINAR.** *Chairman:* Pierre Guibor, MD (New York).

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# FROM THE EDITOR'S DESK

## FEDERAL APPOINTMENTS

Two top federal health posts have been filled. John Howard Moxley III,M.D., of La Jolla, Calif., Dean of the University of California-San Diego Medical School is the new Assistant Secretary of Defense for Health Affairs. Another Californian, Jere Edwin Goyan, was named to succeed Donald Kennedy as Commissioner of the Food and Drug Administration. Goyan has been Dean of the School of Pharmacy at the University of California-San Francisco.

## COST CONTAINMENT

After a series of very close preliminary votes, the House Commerce Committee has approved a variation of the Administration's hospital cost containment proposal by a vote of 23-19. The action now allows HR 2626 to proceed to the House floor with the equally shaky support of the House Ways and Means Committee. The two Committee-approved versions differ slightly. The Ways and Means version allows more exemptions from the threat of mandatory controls.

## GOVERNMENT LOBBYING

AMA has expressed its support for federal legislation that would prohibit the use of federal funds for lobbying state and local legislative bodies. The proposal is before the Senate Subcommittee on Federal Spending Practices and Open Government. The bill, said AMA, would "remind the heads of our federal agencies that the American people expect their tax dollars to be spent on substantive programs, not on agency image building and massive lobbying efforts."

## HMO PROMOTION

The AMA House of Delegates has condemned the use of public funds to promote the enrollment of Medicare beneficiaries in Health Maintenance Organizations (HMOs). The House reiterated its support for a pluralistic delivery system but charged that a recent Health Care Financing Administration mailing is "an arbitrary and discriminatory promotion of one type of health care delivery system over others."

## STUDENT RESEARCH

The University of Texas Medical Branch in Galveston and the AMA Education and Research Foundation will sponsor four student research forums next year. AMA-ERF is providing $46,012 to finance three regional forums and a national forum designed to encourage medical research among students. One of the regional forums will be in Miami, February 27-29; the national forum will take place in Galveston, April 23-26.

## EW AMA COMMITTEE

The AMA's new Committee on Accreditation of Continuing Medical Education has eceived its charter from the Board of Trustees. Born of last summer's AMA divorce rom the Liaison Committee on Continuing Medical Education, the Committee will have up o 24 members. Among its functions will be to recommend procedures and standards for valuation and recognition of state medical societies to accredit organizations and nstitutions providing intrastate CME.

## MA VS. FTC

The AMA has joined a court fight against Federal Trade Commission meddling in rofessional regulation. The AMA appeared as a "friend of the court" before a U. S. ourt of Appeals to protest the FTC's rule requiring unlimited advertising of ophthalmic oods and services. The FTC rule is being challenged by the American Optometric ssociation and nine states whose regulations would be overturned by the rule.

## MA'S POSITION

The AMA Board of Trustees has voted to support federal legislation (S 523) designed o improve recruitment and retention of physicians in the military services. It would rovide pay increases and cost of living allowances. The Board also supports a Part B edicare amendment that would increase the annual limit for outpatient physical therapy o $200; but opposes the Mental Health Systems Act of 1979 (S 1177 and HR 4156) unless ajor changes are made.

## OUSE STAFF

Congress has been advised of AMA's support for a bill that would amend the National abor Relations Act to allow housestaff to engage in collective bargaining. The AMA ointed out that house officers receive salaries, are supervised, and provide services f value to their employers, all of which indicate an employer-employee relationship. LRB is still smarting from a federal court reversal of its decision three years ago hat interns and residents are students, not employees, and thus not covered by the abor relations act.

## YPOGLYCEMIC LABELS

The American Medical Association has appealed to the Food and Drug Administration o withdraw a proposed rule for labeling oral hypoglycemic agents. AMA said in a etter that the proposed labeling "repeatedly raises the spectre of 'apparent increased ardiovascular hazard' " with these agents and "implies that these drugs are always ontraindicated for use as the primary therapeutic agent." AMA pointed out that the mplications are inappropriate because they are based on an uncompleted study ndertaken more than 10 years ago. The results have been the subject of scientific ebate for years.

**The Editor**

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# Quinamm™

**AVAILABLE ONLY ON PRESCRIPTION**

**Brief Summary**

**INDICATIONS:** For the prevention and treatment of nocturnal recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis, and static foot deformities.

**CONTRAINDICATIONS:** Because of the quinine content, Quinamm is contraindicated in women of childbearing potential, in pregnancy, in patients with known quinine sensitivity, and in patients with glucose-6-phosphate dehydrogenase deficiency. Hemolysis (with the potential for hemolytic anemia) has been associated with a G-6-PD deficiency in patients taking quinine.

**PRECAUTIONS:** Thrombocytopenic purpura may follow the administration of quinine in highly sensitive patients. Recovery will follow withdrawal of the medication.
Cinchona alkaloids, including quinine, have the potential to depress the hepatic enzyme system that synthesizes the vitamin K-dependent factors. The resulting hypoprothrombinemic effect may enhance the action of warfarin and other oral anticoagulants.

**ADVERSE REACTIONS:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. If ringing in the ears, deafness, skin rash, or visual disturbances occur, the drug should be discontinued.

**DOSAGE AND ADMINISTRATION:**
1 tablet upon retiring. When necessary, 1 additional tablet may be taken following the evening meal.

Product Information as of September, 1977

U.S. Patent 2,985,558

**Merrell**

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# Quinamm™

each tablet contains quinine sulfate 260 mg., aminophylline 195 mg.

## specific therapy for painful night leg cramps

Nocturnal recumbency leg muscle cramping is frequently an unwelcome bedfellow for many patients—especially those with arthritis, diabetes or peripheral vascular disease... consider Quinamm... simple, convenient dosage—usually just one tablet at bedtime... can provide restful, welcome sleep without night leg cramps.

See opposite page for prescribing information.

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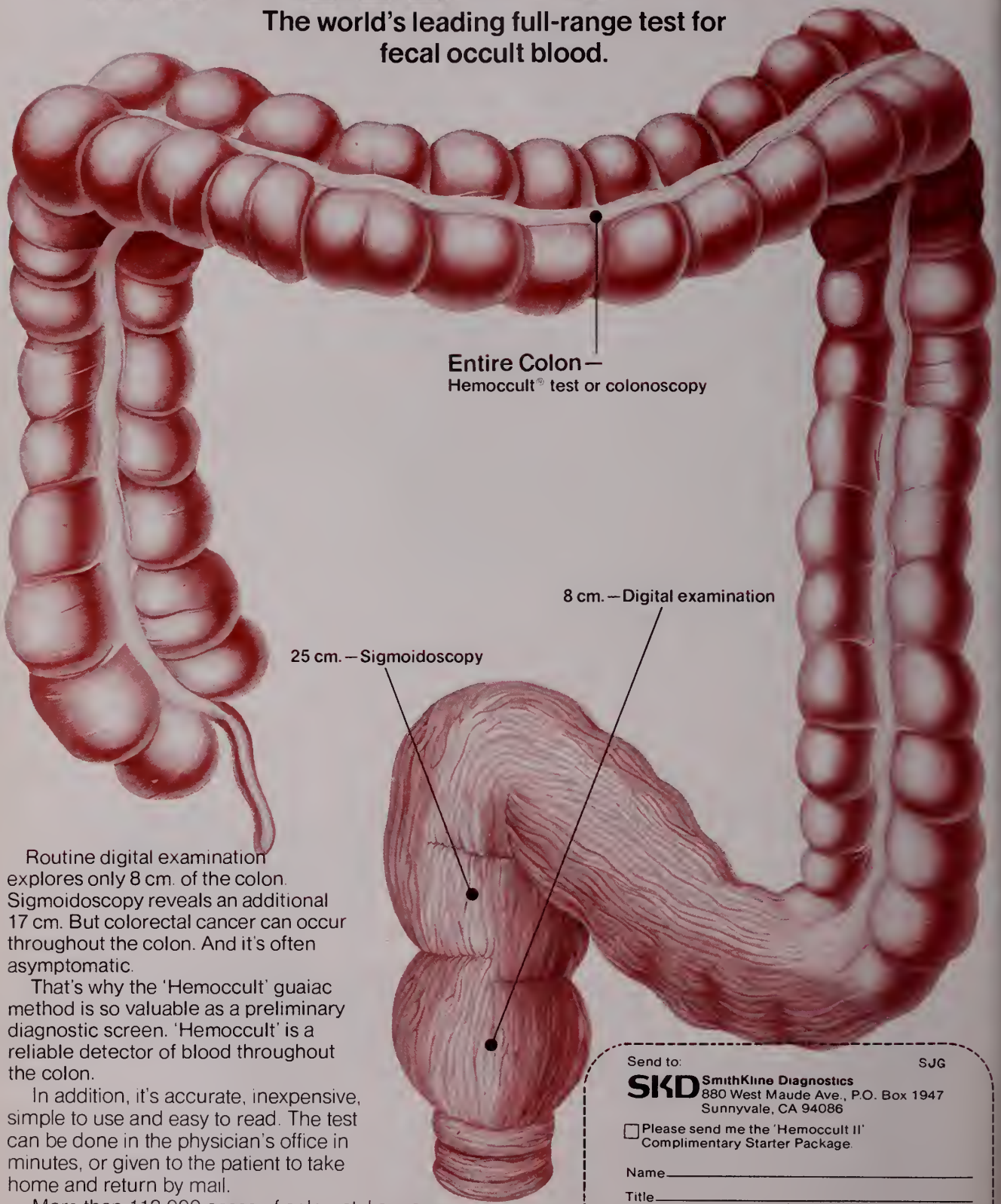


Routine digital examination explores only 8 cm. of the colon. Sigmoidoscopy reveals an additional 17 cm. But colorectal cancer can occur throughout the colon. And it's often asymptomatic.

That's why the 'Hemoccult' guaiac method is so valuable as a preliminary diagnostic screen. 'Hemoccult' is a reliable detector of blood throughout the colon.

In addition, it's accurate, inexpensive, simple to use and easy to read. The test can be done in the physician's office in minutes, or given to the patient to take home and return by mail.

More than 112,000 cases of colorectal cancer will occur in the United States this year. The earlier they are diagnosed, the greater the chances for successful treatment.

**'Hemoccult' is available through local distributors, nationwide.**

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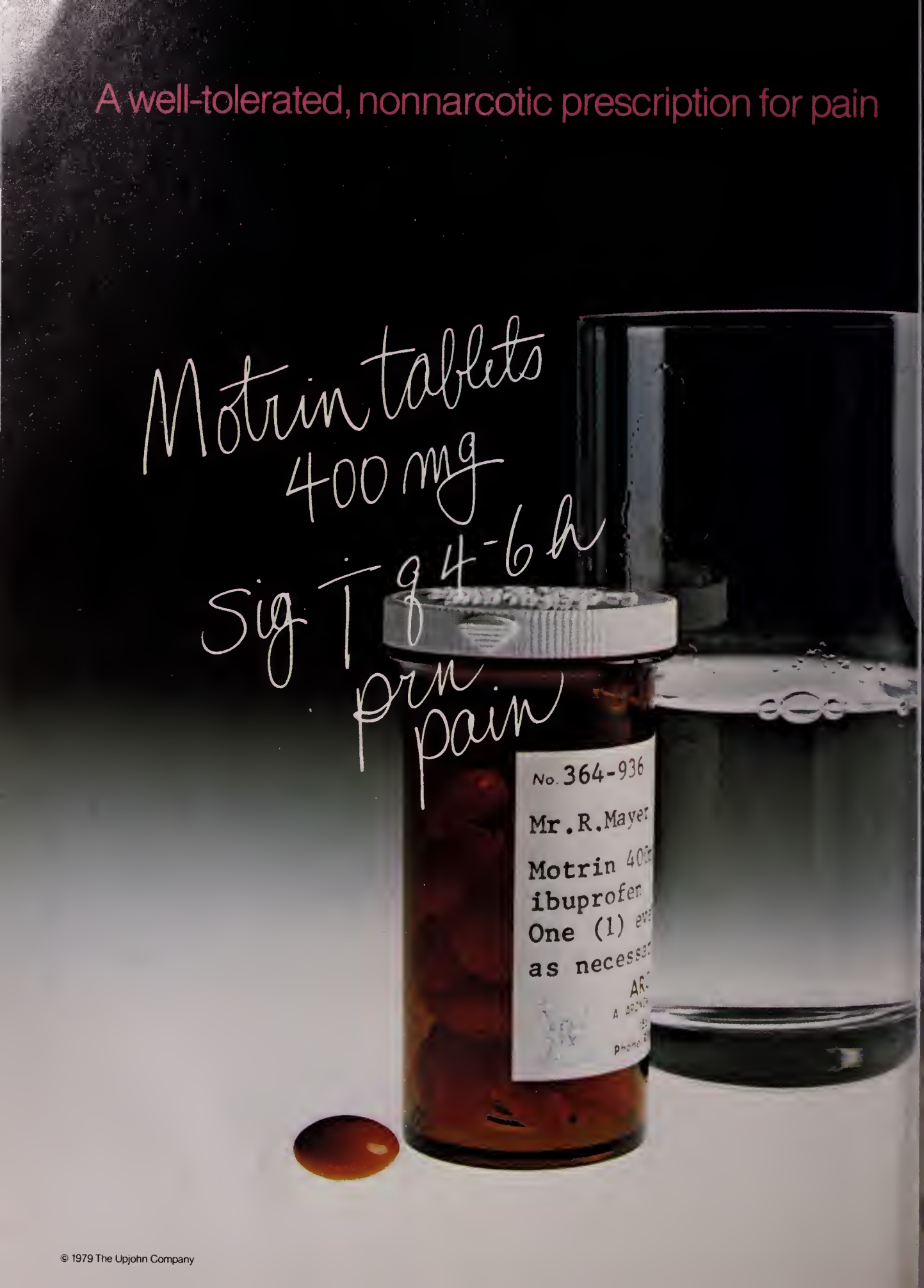
# The Upjohn Company announces a new indication for Motrin®
(ibuprofen)

# A well-tolerated, nonnarcotic prescription for pain

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# Motrin now proved an effective analgesic for mild to moderate pain

Motrin 400 mg provided greater relief of pain than did propoxyphene 65 mg in controlled clinical pain studies.

| Time after drug administration (hour) | | .5 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|
| Mean relief-of-pain scores* (No. patients reporting) | Motrin 400 mg ibuprofen | .89 (108) | 1.25 (108) | 1.36 (108) | 1.28 (107) | 1.19 (106) |
| | Darvon 65 mg propoxyphene | .66 (100) | .99 (99) | 1.13 (96) | .99 (96) | .80 (96) |
| Statistical significance | | $p<0.02$ | $p<0.01$ | $p<0.05$ | $p<0.02$ | $p<0.002$ |

*0 = No relief 1 = Partial relief 2 = Complete relief

Data on file at The Upjohn Company

Motrin demonstrated statistically significant greater relief of pain than did Darvon at all time intervals.

# Motrin 400 mg TABLETS
## ibuprofen, Upjohn

- Not a narcotic • Not addictive • Not habit forming
- Rapid analgesic action • Indicated in acute and chronic pain
- Well tolerated. The most common side effect with Motrin is mild gastrointestinal disturbance.

Please turn the page for a brief summary of prescribing information.

Upjohn

# Motrin® (ibuprofen) now proved an effective analgesic for mild to moderate pain

**Motrin® Tablets** (ibuprofen, Upjohn)

**Indications and Usage:** Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

Relief of mild to moderate pain.

**Contraindications:** Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

**Warnings:** Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

**Precautions:** Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

**Drug interactions.** *Aspirin:* used concomitantly may decrease Motrin blood levels. *Coumarin:* Bleeding has been reported in patients taking Motrin and coumarin.

**Pregnancy and nursing mothers:** Motrin should not be taken during pregnancy or by nursing mothers.

**Adverse Reactions**

*Incidence greater than 1%*

**Gastrointestinal:** The most frequent type of adverse reaction occurring with Motrin is gastrointestinal (4% to 16%). This includes nausea,* epigastric pain,* heartburn,* diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness,* headache, nervousness. **Dermatologic:** Rash* (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

*Incidence 3% to 9%.

*Incidence less than 1 in 100*

**Gastrointestinal:** Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

*Causal relationship unknown*

**Gastrointestinal:** Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

**Overdosage:** In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

**Dosage and Administration:** Rheumatoid and osteoarthritis, including flares of chronic disease: Suggested dosage is 300, 400 or 600 mg t.i.d. or q.i.d.

Mild to moderate pain: 400 mg every 4 to 6 hours as necessary for relief of pain.

Do not exceed 2400 mg per day.

**Caution:** Federal law prohibits dispensing without prescription.

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# Summary of the Board of Governors Meeting October 11 - 12, 1979

The following is a summary of the actions taken by the Board of Governors at its Fall meeting, October 11-12, 1979.

**THE BOARD:**

**1980 FMA Leadership Conference**

Approved a format similar to last year's for the 1980 FMA Leadership Conference. The program will cover a variety of subjects and topics that are of primary interest and concern to physicians. The conference will be held January 26-27, 1980, at the Dutch Inn, Lake Buena Vista, Florida.

**1980 Meeting Dates**

Changed the meeting dates for the June, 1980, Executive Committee and Board of Governors meeting from June 13-15, 1980, to June 19-22, 1980.

**1980 Annual Meeting Format**

Approved the format for the 1980 Annual Meeting to be held May 7-11, 1980, at the Diplomat Hotel, Hollywood, Florida. In keeping with the general theme of physical fitness/lifestyle, there will be a special symposium on physical fitness on Thursday afternoon and evening. Details regarding the scientific program and other activities will be included in a special annual meeting *Brief* to the entire membership.

Wednesday, May 7
- 10:00 a.m. — General and Delegates Registration
- 1:00 - 4:15 p.m. — Scientific Sections
- 4:30 - 5:30 p.m. — First House of Delegates

Thursday, May 8
- 8:00 a.m. — Blue Shield Annual Meeting
- 9:30 a.m. — R.C.'s I and V
- 10:00 a.m. — R.C.'s II and IV
- 10:30 a.m. — R.C. III
- 8:30 a.m. - 4:30 p.m. — Visit Exhibits

Friday, May 9
- 8:00 - 10:45 a.m. — Scientific Sections and Specialty Groups
- 11:00 a.m. — General Session (Baldwin Lecture)
- 12:15 - 1:30 p.m. — Auxiliary/FLAMPAC Luncheon
- 8:30 a.m. - 4:30 p.m. — Visit Exhibits
- 2:00 - 6:00 p.m. — Scientific Sections
- 6:30 - 7:30 p.m. — President's Reception

Saturday, May 10
- 8:00 a.m. - 12:00 noon — Specialty Groups and Scientific Sections
- 8:30 a.m. - 4:30 p.m. — Visit Exhibits
- 1:00 - 2:45 p.m. — Specialty Groups and Scientific Sections
- 3:00 p.m. — Second House of Delegates, Dismantle Exhibits and Specialty Group Socials

Sunday, May 11
- 9:00 a.m. — Third House of Delegates
- 12:00 noon — Post Convention Board Meeting

**Workers' Compensation**

Received a report that the Florida Medical Association, on behalf of its some 12,500 members, filed on Friday, October 5, 1979, a petition with the Division of Workers' Compensation, Department of Labor and Employment Security, for an amendment to the existing rules that relates to medical and surgical fee schedule under the Florida Workers' Compensation Act. The medical and surgical fee schedule presently in use was originally adopted in 1975. During the ensuing four years inflation, other economic factors, changes in medical treatment and procedures have contributed to the inadequacy of the current fee schedule. Accordingly, it is the position of the Florida Medical Association that the existing fee schedule does not now meet the requirements of and is in violation with the statutory requirements of the Workers' Compensation Act.

**Medical Solution System**

Endorsed the "Medical Solution System" for electronic data processing for members of the FMA provided: FMA has appropriate input in the research and development to perfect and keep the software current and practical; an appropriate agreement can be finalized with the owner of the software for the Florida Medical Foundation to receive a royalty income and to monitor the system; and that the FMA expend no funds on this program.

**Medico-Legal Code**

Approved the establishment of a joint liaison committee with the Florida Bar and referred a proposed medico-legal code to this committee for review and recommendations regarding approval of a finalized code by the respective parent organizations.

**Florida Medical Insurance Trust**

Authorized a six-month extension of the FMIT program from January 1, 1980, through June 30, 1980.

**PMUR Medicare**

Authorized the Florida Medical Foundation to extend a contract with Blue Shield of Florida for the purpose of the performance of Peer Review in the State of Florida (except Dade and Monroe counties) for the period October 1, 1979 - September 30, 1980, and extension of the contract between FMF and Group Health, Inc., for the purpose of the performance of Peer Review in Dade and Monroe counties, October 1, 1979 - September 30, 1980.

**PMUR Medicaid**

Approved an agreement between the Florida Medical Foundation and the State of Florida Department of Health and Rehabilitative Services for the FMF to provide Peer Review for Florida's Medicaid program from November 1, 1979 - October 31, 1980.

**In Memorium of Sarah Holland**

Unanimously passed a resolution in memoriam of the late Sarah Holland, wife of Dr. Francis Holland of Tallahassee. Her passing is regarded as a deep and grievous loss by the FMA family.

**Fuel Crisis Policy Statement**

Adopted a statement regarding a fuel crisis in the state:

"Whereas, there is no statewide program provided through the State of Florida or the Governor's office to give physicians priority for gasoline in time of any fuel crisis, and

"Whereas, the Florida Medical Association is continuing to assist its members in obtaining priority whenever this may be possible, therefore, let it be

"Resolved, that the FMA recommend that each component medical society actively pursue priority classification within its own governmental body."

## FMA COUNCILS & COMMITTEES

### Council on Legislation & Regulations

**Legislative Priorities**

Directed that legislation to provide for the recovery of defense costs in cases be the top priority for the 1980 FMA legislative program.

Took the following action regarding additional legislative proposals:

- Urged defeat of efforts to dismantle, or weaken, Florida's health units and retention of local control.
- Supports efforts to control the cost of medical care that are consistent with the FMA's position paper on the cost of medical care.
- Seek defeat of any legislation to further regulate the private health care community, such as application of certificate of need to physicians' offices.
- Support increased funding for, and improvement in, Florida's public health and mental health programs.
- Urge increased funding for physicians' services with emphasis on outpatient services in Florida's Medicaid, Vocational Rehabilitation, and Children's Medical Services programs.
- Seek passage of legislation relating to confidentiality of medical records.

### Council on Medical Services

**Prescription Writing**

Took a position opposing any drug prescribing role by anyone except licensed physicians, dentists, veterinarians and podiatrists.

**Advanced Nurse Practitioners**

Voted to formally notify the Board of Medical Examiners' three representatives to the State Board of Nursing's Advanced Nurse Practitioners Advisory Committee, that the FMA has taken the position that nurses applying for certification as Advanced Nurse Practitioners should be required to demonstrate their proficiency at an advanced level through a written examination within the area of their specialty to insure continued quality medical care in Florida.

**Physician Assistants**

Approved a recommendation to the Board of Medical Examiners that some restriction, in the interest of quality medical care, be placed on the number of Physician Assistants a single physician may supervise.

**Teacher Referrals**

Recommend to the Department of Education and the Health Program Office, Department of HRS, that schools should adopt a policy that in any instance where a student has been identified as having a medical problem, it should be brought to the attention of parents for referral to their own physician or the local health department.

**TB in Local Jails and State Prisons**

Recommends that all prisoners be skin tested for Tuberculosis upon admission to local jails and that follow-up X-rays be performed appropriately and treatment obtained for individuals with positive reactions.

Recommends to Florida's Department of Corrections that all prisoners be tested for Tuberculosis at the time of admission and discharge from the State Prison system with follow-up X-rays performed and appropriate treatment obtained for positive reactions.

**AMA Jail Project**

Received a report that applications have been received from sixteen jails for participation in the AMA Jail Project. The Florida Medical Foundation has contracted with the American Medical Association for participation in this national program to improve medical care and health services in jails. An announcement of the ten jails selected to participate in the program will be made within the next ten days.

**Body Stimulants**

Voted to notify Akers Pharmaceutical Company of Lewistown, Pennsylvania, that the FMA objects to their direct mail advertisements to Florida's teenagers promoting the use and sale of body stimulants, and considers such activity as being clearly unethical.

**County Medical Societies**

Requested that county medical societies help promote this year's FMA theme on physical fitness/and lifestyles through the sponsorship of local events.

**Team Physicians**

Expressed to the Department of Education the opinion that school athletic team physicians should be licensed under Florida Statutes Chapters 458 and 459 to prescribe medicine and perform surgery in the State of Florida.

### Council on Specialty Medicine

**Advanced Training Programs**

Agreed there should be criteria established for admission to advanced medical training programs to assure that participants have the necessary qualifications to receive advanced training.

**Neonate Transfers**

Requested FMA legal counsel to review the subject of neonate transfer liability for an opinion on who is legally responsible when the neonate transport team has arrived at the referring hospital and has begun stabilization techniques as directed by the receiving physician.

**Children's Medical Services**

Directed that FMA actively seek upgrading of the medical fee schedule of the Department of HRS' Children's Medical Services program.

### Council on Medical Economics

**Joint Legislative Workshop**

Approved a joint legislative workshop with the Florida Hospital Association, Florida League of Hospitals, and the Group Practice Management Association to discuss the legislative priorities of the respective organizations in an effort to better coordinate legislative activities in Tallahassee.

### Council on Government Programs

**HSA Negotiations Training Program**

Authorized a negotiations training program to be conducted in Florida early in 1980 for physicians involved with HSA's and other government programs to be modeled after the one designed for the Minnesota Medical Association by the Department of Negotiations of the American Medical Association.

**HSA Lobbying Efforts**

Directed FMA legal counsel to review the legality of utilizing Federal, State, and local funds to support lobbying activities by HSA's or representative organizations.

**Proposed State Health Plan**

Authorized the establishment of specialty panels for the purpose of rewriting fascicles of the Proposed 1979 Florida State Health Plan for: Cardiovascular Disease, Cancer, Mental Health, Obstetric Services, Acute Care beds and Computerized Tomography Scanners.

**HRS Fee Schedule**

Approved a legislative priority to seek adequate funding of the Department of HRS physicians fee schedule to insure sufficient providers to care for clients of the Department of Health and Rehabilitative Services programs, and to maintain the quality of medical care.

### Committee on Peer Medical Utilization Review

**Unnecessary Concomitant Care**

Directed that the membership be advised that the Committee on Peer Medical Utilization Review has identified what appears to be a trend toward unnecessary concomitant care, which is contributing to the rising cost of medical care. The Board reaffirms the principal of medical ethics which provides that it is unethical for a physician to prescribe or provide unnecessary services.

### AMA Delegates

**AMA House of Delegates**

Referred to the FMA Judicial Council for consideration and recommendations back to the board prior to the 1980 FMA annual meeting, the report and recommendations of the AMA Ad Hoc Committee on the Principles of Medical Ethics. FMA's position regarding the proposed principles will be transmitted to the AMA for consideration at the 1980 AMA annual meeting through Florida's AMA Delegates or other appropriate mechanism.

**Florida Resolutions**

Florida introduced three resolutions at the AMA Annual Meeting in July. The following is a summary of the action taken regarding these resolutions by the House of Delegates.

**Resolution #19**

Access to Medicare Claim Payment Information. The resolve of this resolution commends the AMA for adoption of Resolution #96 at the 1978 Interim Meeting and recommended that its constituent state medical associations be requested to support the AMA in the successful implementation of Resolution #96. **Resolution #19 was adopted.**

**Resolution #20**

AMA Business Meetings and Scientific Sessions. The resolve of this resolution called for the AMA to re-establish the policy that an AMA scientific session be held in the same city at both the Annual and Interim Meetings of the House of Delegates on continuous and/or overlapping dates. **Resolution #20 was not adopted.**

**Resolution #21**

Federal funding for HSA's. The resolves of this resolution recommended that the AMA petition the United States Congress to eliminate or drastically reduce funding for HSA's and further that the AMA actively encourage each constituent of state medical associations and component county medical societies to urge physicians to express this view in a positive manner to each member of the Congress of the United States. The House amended Resolution #21 by substituting the first resolve "federal funding for health planning" for "the funding for HSA's". **Resolution #21 was adopted as amended.**

RESOLVED, That the American Medical Association petition the United States Congress to eliminate or drastically reduce federal funding for health planning; and be it further

RESOLVED, That the AMA actively encourage each constituent state medical association and every component county medical society to actively urge physicians to express this view in a positive manner to each member of the Congress of the United States.

**Public Relations**

**Pubic Relations Report**

Received a summation of the activities and accomplishments of the FMA Public Relations program. The main thrust has been to develop and utilize an instant response network in order to disseminate the physician's viewpoint on issues concerning the quality or cost of health care. Examples include the response to Kennedy's proposed National Health 'nsurance, Dr. Hodes' position on the ew Medical Practice Act, and the gasoline emergency. Some other activities include the preparation of 12 new radio tapes for the highly successful 5-minute series, expansion of the medical message column to high school newspapers and an editorial visit to editors of nine major daily newspapers to take place in November.

---

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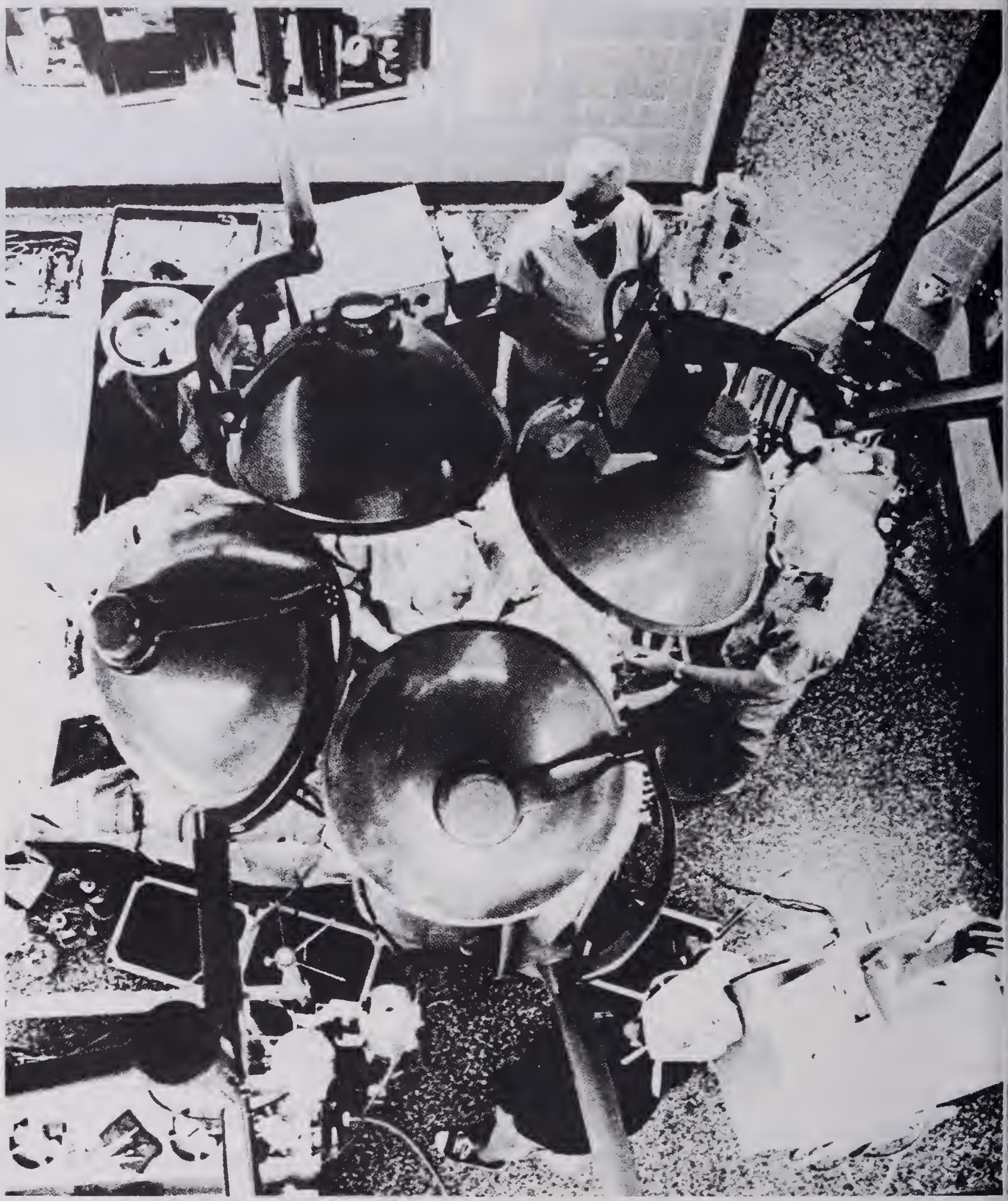

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# Professional Liability Legal Update

## Medical Records

In virtually every discussion of medical malpractice risk management, the critical importance of keeping accurate, complete medical records is stressed. Yet, in spite of these constant admonitions, large numbers of physicians continue to be perilously lax in their record keeping procedures. Because of recent legislative changes, the need for maintenance of proper medical records must once again be emphasized.

The 1979 Medical Practice Act now provides that a physician may be subjected to disciplinary action for failure to keep written medical records justifying the course of treatment of the patient, including, but not limited to, patient history, examination results and test results. The disciplinary action may include suspension or revocation of the offending physician's license, as well as the imposition of an administrative fine of up to $1,000 for each separate offense.

The necessity for good medical records should be obvious to all physicians. The volume of patients and the length of time between their visits, makes good records essential to continuing care and treatment of patients. In addition, however, it must be realized that the need for good record keeping has become greater in the face of the increase in frequency and severity of malpractice claims. In the unfortunate event that a lawsuit is commenced, good records can be a physician's best ally. Indeed, in most cases they form the bedrock of the defense.

In evaluating a potential malpractice claim, one of the first steps taken by a plaintiff's attorney is a thorough review of the medical records. Many times good medical records prevent the case from ever going beyond this stage. Obviously, if the records indicate that the course of treatment given the patient was justified or that the result complained of was merely a risk inherent in the procedure performed, the chances of a plaintiffs attorney actively pursuing the claim are slight. On the other hand, incomplete or inaccurate records may not only precipitate a lawsuit that might have been avoided, but will often contribute significantly to a successful verdict for the patient.

If in preparing medical records you keep several basic points in mind, you can greatly improve the quality of your records and substantially reduce the possibility that these records will be unjustifiably utilized against you in litigation. First, all medical entries should be made promptly and in a clear and legible fashion. The longer you wait, the greater the chance for error. Secondly, you should constantly strive to maintain the proper information in your records. A good rule of thumb is that the records should contain whatever you, as a consultant or subsequent treating physician, would need to acquire an understanding of the patient's history and effectively commence treatment. Likewise, in a case in which you deviate from the usual course of treatment it is always helpful if you record the reasons for your deviation. When ordering tests for hospital patients insure that the test results have been recorded in the patient's chart and reviewed prior to the surgery. This is true even though the "pre-op tests" are considered "routine". When medical "trouble situations" develop a physician should document the crisis carefully and as thoroughly as possible. Note the efforts, the diligence and alternatives considered. Note the fact a consultant was called and the action taken, etc.

As important as what medical records should contain is what they should not contain. The guiding principle is relevancy. You should guard against inclusion of unnecessary or gratuitous comments. For example, irrelevant personal observations about the patients personality should be avoided. Likewise, the records should not be used to criticize other physicians or hospitals. And, most importantly, physicians should not record unwarranted admissions of liability in cases in which an adverse medical result is achieved.

No matter how careful you are in your record keeping, there will invariably be times when you discover that an inaccurate entry has been recorded. In this case, you should be extremely careful in correcting the inaccuracy to avoid even the slightest implication that the records have been tampered with. The best way to correct the error is simply by drawing a single line through the inaccurate original entry. An initialed marginal note should also be made indicating the error and including the time and date of the corrected entry. It is far better for the record to show that a record-keeping effort has been made and corrected than to allow the suggestion that the records have been "doctored". In a malpractice action, once the suggestion of record tampering is successfully made, the physician's credibility is almost always injured beyond repair. This destruction of the physicians credibility leads most often not only to a successful verdict for the patient, but also to a verdict far in access of what would have been awarded absent evidence of altered records.

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Prepared and submitted by John E. Thrasher, J.D., Vice President and Legal Counsel, and Anthony J. McNicholas III, J.D., Associate Legal Counsel, Professional Insurance Management Co. (PIMCO), Jacksonville, Fla.

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# Briefs

THE FLORIDA MEDICAL ASSOCIATION, INC. 1874

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(Following is a condensed version of a recent issue of FMA "Briefs")

No. 266
October 1, 1979

**FMA MEMBERS ON CONTINUING MEDICAL EDUCATION CYCLE I** are reminded that their three-year reporting period ends on December 31, 1979. They should file reports of credits earned during 1977-1979 with their county medical societies soon after January 1. Meanwhile, physicians who should have reported their hours last January, but did not, have only two months remaining in their one-year make-up period.

**RECENT CHANGES TO THE WORKERS' COMPENSATION LAW** which were effective August 1, 1979, regarding medical treatment, are causing some confusion among physicians who treat workers' compensation cases. Here are ten points of which the physician should be aware:

1. The law requires the employer to furnish to an injured employee medical treatment, care and attendance for such time as the nature of the injury in the process of recovery may require.

2. When the employer fails to furnish medical treatment to an injured employee, the injured employee may seek medical treatment at the employer's expense.

3. The employee must advise the employer of his need for medical treatment (synonymous with the first report of injury). Knowledge by the employer of the injury or treatment may be sufficient notice to the employer.

4. The injured employee has the right to request a change of physician and the employer has a duty to select another physician unless the deputy commissioner decides that such a change of physician is not in the best interest of the employee.

5. There can be no coercion of the employee by the insurance company or the employer in the selection of a physician. Coercion can result in being found guilty of a misdemeanor of the second degree.

6. The time limit for filing a claim is two years from the date of last payment of compensation or the date of last remedial treatment.

- more -

7. Doctors must report initial medical treatment of disabling injuries in workers' compensation cases within ten (10) days to the division and to the insurance company. Failure to make such a report may render claim for treatment invalid. All medical reports must be reported to the insurance company.

8. On medical only or first aid cases, the insurance company or employer, if self-insured, must report the cost of these medical claims to the division within sixty (60) days after the insurance company or employer, if self-insured, receives the notice of injury.

9. The employer or the insurance carrier is responsible for 100% of attorney's fees for failure to furnish medical treatment on medical only, or first aid claims, when the injured employee is successful in a claim for medical treatment against the insurance company or employer.

10. All medical reports received by employer, insurance company, or injured employee, or the attorney for any of them must be filed with the division within five (5) days of receipt.

**INFORMATION SHEETS CONCERNING DARVON** have been sent out to pharmacies by Eli Lilly and Company with a request they be given to all patients with a prescription for the product. It is possible this leaflet could cause apprehension on the part of the patient. Therefore, doctors may wish to inform patients of this fact before writing such a prescription. Any physician who would like copies of the leaflet may obtain same from the nearest Walgreen pharmacy.

**POLL SHOWS PUBLIC TRUSTS DOCTORS, HOSPITALS** to protect privacy. The American public is seriously concerned about the loss of privacy and overwhelmingly feels the federal government should do something about it, according to a recent Lou Harris survey on public attitudes toward privacy. Harris interprets the study results to mean the public is handing the government a mandate to stop, for example, the use of master computer files for health records. The public is also saying that insurance, credit, and finance companies should prove they are taking the necessary steps to protect the confidentiality of information they collect. Doctors were rated the least intrusive with only 11 percent of the public feeling that doctors ask for too much personal information. Hospitals were the second most trusted group, with only 24 percent of the respondents giving them bad marks.

**IMPROPER PRESCRIPTION WRITING.** During the 1979 FMA House of Delegates Meeting, the following statement was referred to the Board of Governors for publication in appropriate FMA publications: "If a prescription is written on a blank which does <u>not</u> have the name of the prescriber printed at the top, such as hospital prescription blanks, the prescriber <u>must</u> print his name under his signature at the bottom. Prescriptions for controlled substances (scheduled drugs) must be written on a single prescription blank, with no other substance prescribed on the same prescription form.

# # # #

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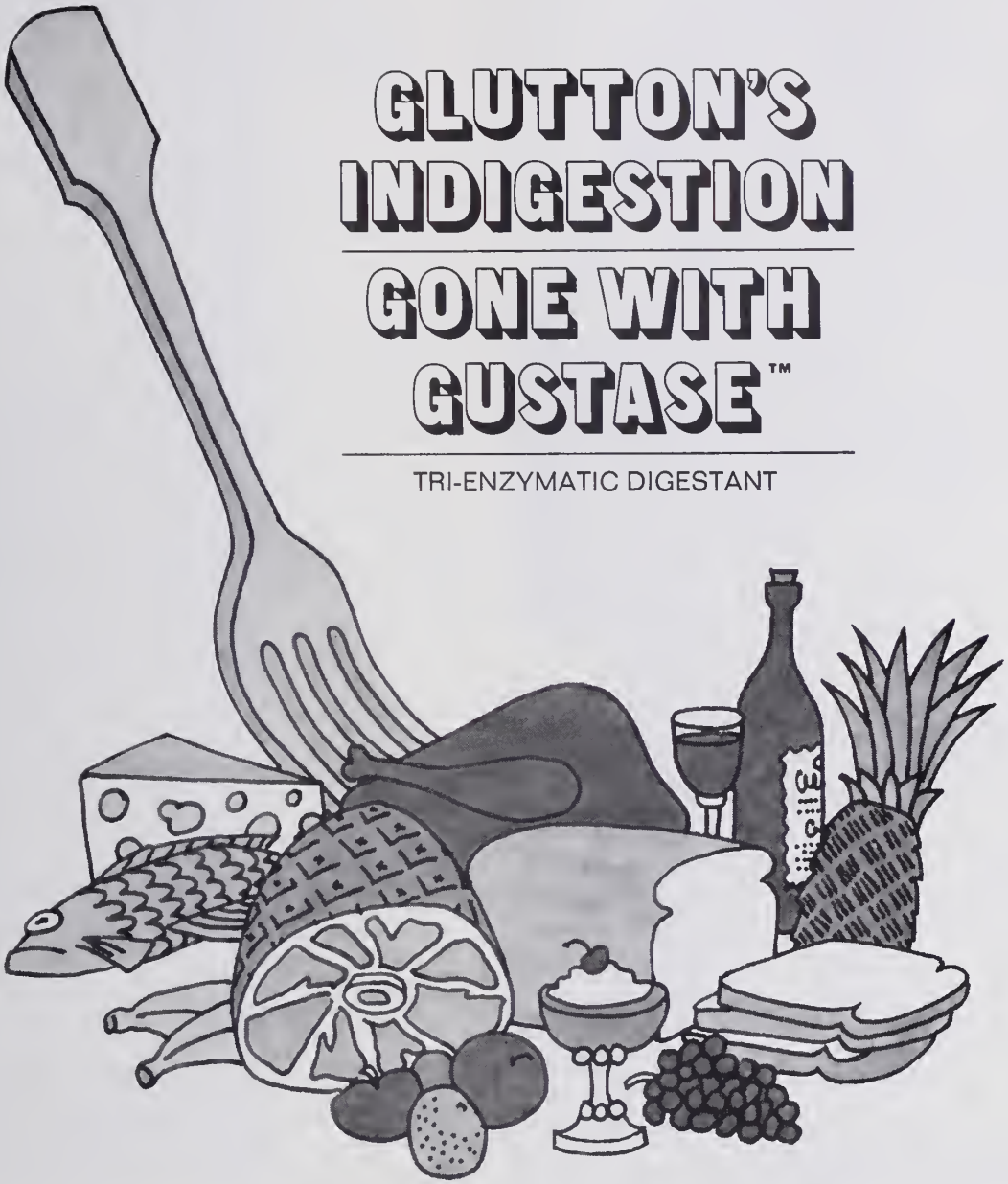

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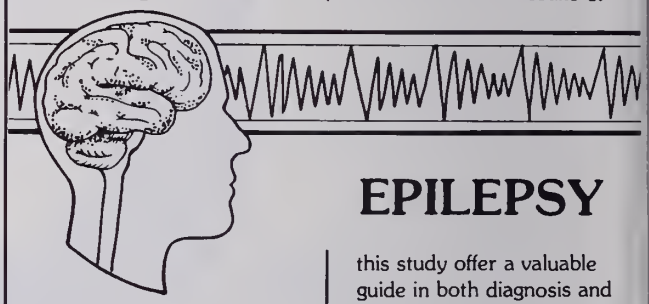
# MEDICAL MESSAGE
## from the Florida Doctors

THE FLORIDA MEDICAL ASSOCIATION, INC. 1894 M D

# EPILEPSY

Epilepsy is one of the most misunderstood conditions of the human nervous system and your Florida doctors want to clear up many of the myths surrounding epilepsy. Chances are someone you know may have epilepsy, but modern medical treatment can control the seizures that once kept epileptics from leading normal lives.



Epilepsy is a brain disorder caused by overactive brain cells and not a disease as believed by so many. Its causes are many — alcohol or drug abuse, brain tumors, high fever, accidents which result in head injuries, and it is also hereditary — all resulting in damage to the nerve cells of the brain.

When the nerve cells in your brain become damaged, they cannot properly relay the normal energy impulses that your brain transmits. These impulses cause some of the brain cells to become intermittently overactive, continuously stimulating the muscles. This twitching and jerking of the muscles is an epileptic seizure that you may have witnessed.

Ancient superstitions concerning people who suffered from uncontrollable epilepsy excluded them from many activities we take for granted, such as, driving an automobile, obtaining employment, and attending school. With the advancements being made in medicine, doctors can now diagnose and control epilepsy. One of the most important tests in a case of suspected epilepsy is an electroencephalogram (EEG). This records the brain's electrical activity and may reveal evidence of localized disturbance in any area of the brain. It can trace where an epileptic discharge begins, where it spreads, its intensity and duration, and the time of occurrence. The results of this study offer a valuable guide in both diagnosis and treatment.

X-rays of the skull and brain scans are commonly taken to discover evidence of injury or damage to the brain that could result in seizures. One research center uses a television to monitor a patient's face, body and EEG as a means of discovering any abnormal brain activity.

Through independent medical research, medication has been developed that can control seizures. Medication properly taken, and used on a regular basis, satisfactorily controls the seizures of over 85% of the persons with epilepsy, with more than half of them being made completely free of any recurrence of the seizures that once ostracized them from society.

Advances in medicine under our Democratic system are helping Americans enjoy the best health care in the world, at the lowest cost possible.

*This is a medical message from the Florida Medical Association in behalf of the doctors of Florida and as a public service feature of this newspaper.*

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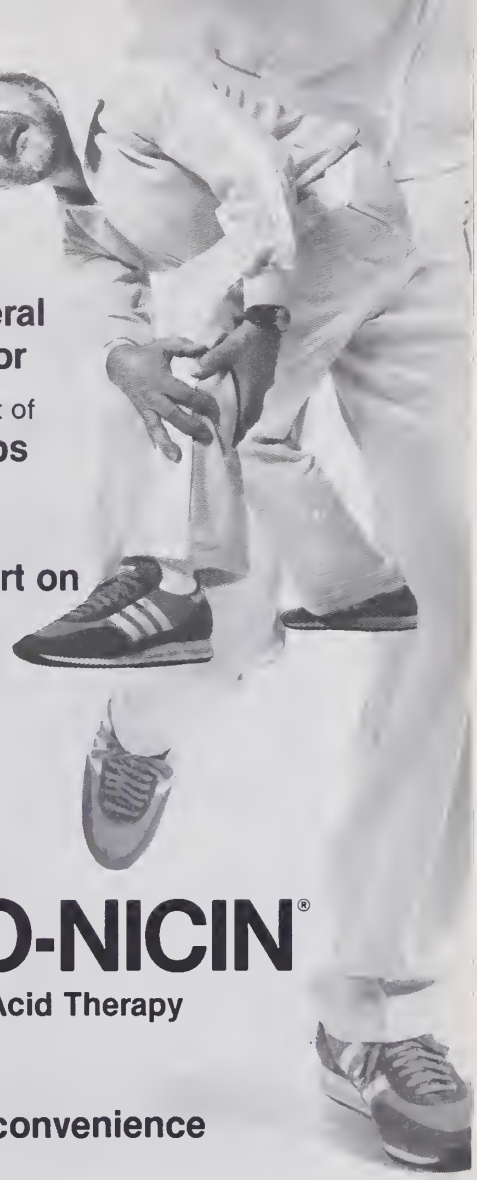

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**DOSE:** 1 to 3 tablets daily.
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**DOSE:** 1 to 5 tablets daily.
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**Indications:** For use as a vasodilator in the symptoms of cold feet, leg cramps, dizziness, memory loss or tinnitus when associated with impaired peripheral circulation. Also provides concomitant administration of the listed vitamins. The warm tingling flush which may follow each dose of LIPO-NICIN® 100 mg. or 250 mg. is one of the therapeutic effects that often produce psychological benefits to the patient.

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**Contraindications:** Patients with known idiosyncrasy to nicotinic acid or other components of the drug. Use with caution in pregnant patients and patients with glaucoma, severe diabetes, impaired liver function, peptic ulcers, and arterial bleeding.

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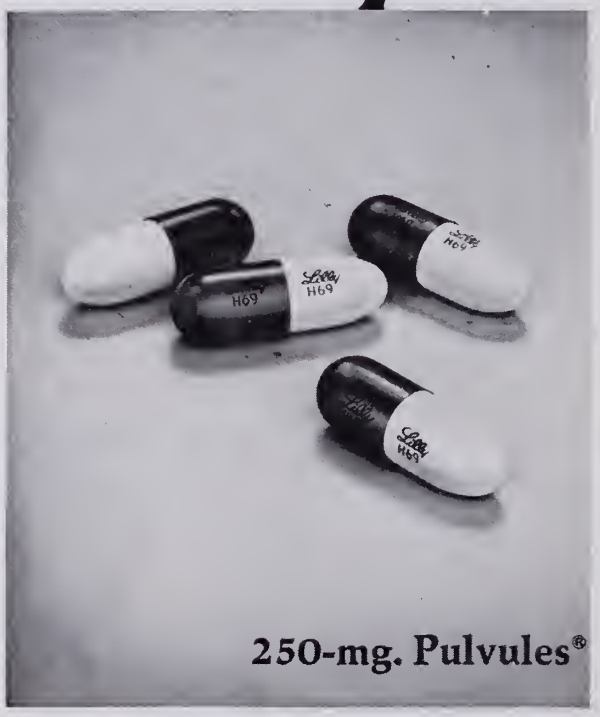

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# The FMA Income Protection Plan

For the past 20 years, the Florida Medical Association has sponsored the Income Protection Program to help protect its members and their families from numerous financial problems total disability could cause. Since 1956, members have been able to purchase disability insurance through the program assuring them of an income if an accident or illness prevented their practice of medicine.

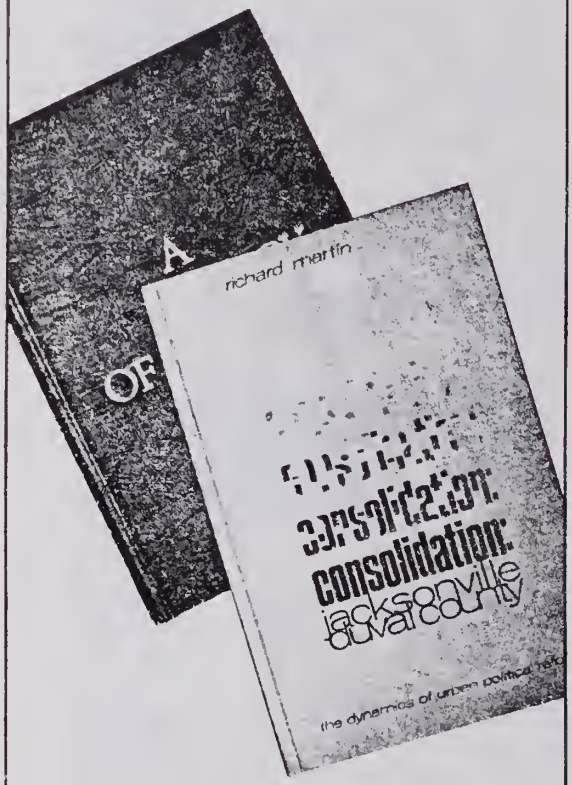
This program, underwritten by CNA Insurance's Continental Casualty Company of Chicago, is being updated to provide even more effective insurance protection for our members . . . protection which meets today's needs at the lowest possible premium rate.

The new Income Protection Program offers members a greater selection of coverage options. It provides benefits from $25 to $450 per week, beginning the 31st, 61st, 91st or 181st day of total disability. Members may also select between a plan which pays benefits for up to five years or one which pays benefits up to age 65. This wide variety of coverage options allows members to tailor plans to fit their personal situations. It also helps eliminate duplicate benefits, resulting in more comprehensive and economical coverage.

The insurance industry practice of allowing an insured to purchase coverage up to 60% of his or her income also has been adopted by our revised program. This figure, used industry-wide, is the spendable income received after taxes and other payroll deductions have been taken into consideration. Since disability benefits are tax-free, the 60% figure represents the amount of coverage needed to duplicate our member's "take home" salary. The company restricts its participation with other loss of time plans to a maximum of $3,500 monthly income.

The Florida Medical Association's disability program was revised only after a careful study revealed modifications were needed to stabilize and modernize the plan. The new Income Protection Program is better able to provide the coverage needed today, to meet the financial problems caused when an accident or illness results in total disability.

For further information concerning the Plan, contact
The Professional Insurance Management Company (PIMCO)

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**Please consult complete prescribing information, a summary of which follows:**

**Indications:** Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:
"Possibly" effective: as adjunctive therapy in the treatment of peptic ulcer and in the treatment of the irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.
Final classification of the less-than-effective indications requires further investigation.

**Contraindications:** Glaucoma; prostatic hypertrophy, benign bladder neck obstruction; hypersensitivity to chlordiazepoxide HCl and/or clidinium Br

**Warnings:** Caution patients about possible combined effects with alcohol and other CNS depressants, and against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Physical and psychological dependence rarely reported on recommended doses, but use caution in administering Librium® (chlordiazepoxide HCl/Roche) to known addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions) reported following discontinuation of the drug

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy. Advise patients to discuss therapy if they intend to or do become pregnant.**

As with all anticholinergics, inhibition of lactation may occur

**Precautions:** In elderly and debilitated, limit dosage to smallest effective amount to preclude ataxia, oversedation, confusion (no more than 2 capsules/day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider pharmacology of agents, particularly potentiating drugs such as MAO inhibitors, phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions reported in psychiatric patients. Employ usual precautions in treating anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation reported very rarely in patients receiving the drug and oral anticoagulants, causal relationship not established.

**Adverse Reactions:** No side effects or manifestations not seen with either compound alone reported with Librax. When chlordiazepoxide HCl is used alone, drowsiness, ataxia, confusion may occur, especially in elderly and debilitated, avoidable in most cases by proper dosage adjustment, but also occasionally observed at lower dosage ranges. Syncope reported in a few instances. Also encountered isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent, generally controlled with dosage reduction; changes in EEG patterns may appear during and after treatment, blood dyscrasias (including agranulocytosis), jaundice, hepatic dysfunction reported occasionally with chlordiazepoxide HCl, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax typical of anticholinergic agents, *i.e.*, dryness of mouth, blurring of vision, urinary hesitancy, constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

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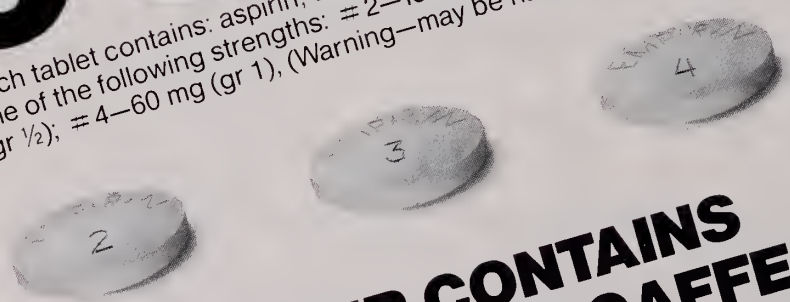


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NOVEMBER 1979
VOL 66 • NO 11

# Current Trends in Education for Family Practice

Cranford O. Plyler, Jr., M.D., A.B.F.P.

**Abstract: In October, 1979, there are in Florida nine civilian Family Practice Residency Programs with 186 residents in training. Of special concern to family practice educators is the development of a person-oriented physician with patient management skills in ambulatory and hospital practice. Along with sound grounding in biomedical and behavioral sciences, the resident physician is taught to interrelate this knowledge with understanding of the patient's socioeconomic milieu and family dynamics in the management of disease and dis-ease. The resident is taught how best to utilize medical subspecialists. Recruitment of a pioneering faculty, faculty development, and curricular enrichment are receiving active and innovative attention. Undergraduate, graduate, and postgraduate education for family practice must maintain high standards and meet special criteria as this specialty pursues academic excellence.**

## Development of a New Specialty

The American Academy of General Practice was founded in 1947. Among its several purposes were the enhancement of educational opportunities for general practitioners and the development of family practice as a certifiable medical specialty.[1] On February 8, 1969, the specialty of Family Practice was created. The American Board of Medical Specialties and the Council on Medical Education of the American Medical Association approved the primary certifying board in this specialty. The American Board of Family Practice conducts examinations and grants certification to family physicians who meet its qualifications and pass the examination. By 1979, nine examinations have been held and more than 19,000 diplomates certified in family practice.

In October, 1979, 6,238 family practice residents were in training in the 364 approved programs in the United States. Since 1970, more than 5,000 residents have graduated from three-year family practice programs.[2]

Florida offers nine civilian and three military family practice programs. Civilian programs and number of residents in October, 1979, are: Pensacola Education Program, 7; Alachua General Hospital, Gainesville, 19; Bayfront Medical Center, St. Petersburg, 19; Florida Hospital, Orlando, 23; Halifax Hospital and Medical Center, Daytona Beach, 21; Polk General Hospital, Bartow, 1; St. Vincent's Medical Center, Jacksonville, 20; Tallahassee Memorial Hospital, 24; University of Miami, 52.

Military programs are located at the USAF Regional Hospital, Eglin Air Force Base; Naval Regional Medical Center, Jacksonville; Naval Aerospace and Regional Medical Center, Pensacola.

## Special Concerns in a New Specialty

A new type of physician has been created. He bears specialty status and has an academic base from which specific and unique skills have been developed. Since, in the delivery of health care, the American public abhors

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high cost, fragmentation of care, and depersonalization of services, this physician effects a well defined purpose in the medical care system contributing to the early and continuing success of family practice.

Kirkwood *et al.*[3] comment that health manpower needs have emphasized three prominent problem areas: inappropriate physician distribution by geographic region and specialty, loss of personal physician-patient relationships, and lack of continuity of care at the first contact level. Public pressure has urged that family physicians be trained to meet these needs. This pressure has created an additional problem area which is a critical need for qualified teachers of future family physicians.

Family doctors are settling in smaller communities. This helps to diminish physician maldistribution, which has become an ominous spectre in American medicine. Data compiled by the American Academy of Family Physicians' Division of Education from a survey of 1977 family practice program graduates shows that more than half of these physicians entered practice in communities of less than 25,000 population.[3]

Family practice education emphasizes concern for health maintenance, long term care for chronic illness, rehabilitation, and counseling for common problems associated with health. General practice and primary care as it may be dispensed by specialists in other disciplines may focus strongly on episodic care and superficial management of acute problems.

The family physician is expected to recognize his charge to integrate behavioral sciences with biomedical sciences, to coordinate in a continuing, comprehensive manner the patient's overall health care in the context of his or her family dynamics, to utilize available resources in the community, and to utilize effectively referrals and consultations with the more limited specialists.

Patient management in ambulatory and hospital practice, based on sound education in the biomedical and behavioral sciences, is the area of expertise unique to family physicians.

The hackneyed phrase ". . . to know everything about everything . . ." when used pejoratively by some of our detractors to describe what they think we think we are trying to do is a conspicuous indication of their gross ignorance concerning the intent and practice of the well educated family physician. The hallmark of a good family physician is that he knows his limitations and how, when and where, most therapeutically advantageously and cost effectively to seek counsel, guidance and assistance in patient care from his subspecialist colleagues. In this area of extended approach to patient management lies the special skills and expertise which make the goals and objectives of family practice indispensible in an ideal system of health care delivery.

An important adjunct to good medical practice is an educational process designed by the physician to draw attention to an individual's health problems in a way that can instill in the patient a sense of the necessity that he become a responsible participant in the prevention, resolution, or modification of his health problems.[4]

Family practice is a specialty which addresses health care needs from a patient-oriented vantage point in such a manner that the patient is provided access to a health care delivery system which considers the whole person. His diseases and dis-eases are considered to be inextricably interrelated with his socioeconomic milieu and his family dynamics. The family is probably the major social unit in the life of most persons. A supportive family bodes well for the health of individual members. Disruptive family dynamics produce and aggravate illness.

It is neither necessary nor appropriate that a patient be coerced into bringing all members of his or her family to the same physician. It is imperative, though, that the family physician consider his patients' illnesses and problems within the context of their family relationships.[5]

Since family doctors are frequently the physician of first contact for patients who are coping poorly with problems of living or who constitute a portion of that great host of the "worried well," counseling capabilities can be valid and effective adjuncts to other forms of patient management.

## Development of a New Academic Discipline—Its Viability

Lewy[6] points out that those who developed the specialty of family practice sought to remedy the deficiencies of general practice by providing intellectually rigorous postgraduate programs, a unique area of expertise, and specialty status. The evolution of the new specialty required definition of content, development of graduate training programs, and specialty departments in medical schools. Also required were establishment of standards, development of mechanisms to ensure adherence to standards, and development of continuing education programs to ensure maintenance of these standards. Still in early stages of development are research programs to further the unique body of knowledge which constitutes family practice.

Family practice education must persist in its development as a strong and identifiable academic discipline, or it becomes fragmented into almost limitless rotations of short duration resulting in experiences of breadth with almost no depth. Unfortunately, some family practice residency programs may have arrested at the level of a three-year rotating internship.

Just as none of the other certifiable medical specialties sprang forth full-blown, family practice, the

youngest of the primary specialties, is in its early developmental stage.

Stephens[7] classifies medical specialties under the following headings:

1. Characteristics of patients (pediatrics, obstetrics/gynecology).
2. Parts of the body (dermatology, orthopedics).
3. Diseases or conditions (allergy).
4. Techniques of treatment (surgery, psychiatry).
5. Relation to special machines (radiology, clinical pathology).

Pellegrino[8] avers that to secure its academic future family medicine must respond to a triad of essentially academic challenges:

1. Does it have a method and intellectual content not central to any other clinical discipline?
2. Can it make a special and needed contribution to patient care?
3. Can it take a mature stance in relationship to the fields most contiguous to it?

Justifiably, family practice should not be required to define itself as a legitimate academic discipline except by virtue of its ability to satisfy criteria and conditions applicable to all specific branches of knowledge claiming intellectual respectability. However, as the new kid on the block, family practice frequently must defend itself against jealousy and misunderstanding among other specialists within the medical community and occasionally against revisionists within its own medical family.

Stephens[7] enumerates conditions and complaints which require unique managerial skills of a wise and compassionate physician.

1. Complaints which are obscure, vague or undifferentiated.
2. Complaints which arise from life-threatening diseases.
3. Complaints which seem out of proportion to physician or laboratory findings.
4. Complaints which are unusual, bizarre, non-physiologic, or non-anatomical.
5. Complaints which are persistent and disabling.
6. Complaints associated with marked anxiety or mood change.
7. Complaints which result from life change, conflict or stress.
8. Complaints which may require risky diagnostic and therapeutic procedures.
9. Complaints arising from conditions which may be managed electively.
10. Conditions which are incurable.
11. Conditions involving habit and the life-style of the patient.
12. Conditions which require moral or ethical decisions.

Education for family practice must be directed toward a continuum of undergraduate, graduate, and continuing medical education.

One of the innovative features of family practice education is represented by the family practice center. It is in this simulated private practice office that residents develop and put into practice the concepts of continuing, comprehensive management of all members of the family or comparable social unit. It is here, ideally, that the doctor in training, under tutelage, precept and admonition of family practice faculty, inculcates into his therapeutic armamentarium the lessons learned in medical school and subspecialty rotations and becomes a specialist in patient management.

Medical students rotate through practicing physicians' offices, clinics, and family practice centers. Physicians' practices and residency programs are strengthened when practicing physicians, academicians, and residents come in contact with the stimulating and challenging person of the student. In education, a dynamic and reciprocal relationship between student and teacher enhances the learning process for both.

In the preface to his book, **The Art of Teaching,** Highet[9] states, "This is a book on the methods of teaching. It does not discuss the subjects which are taught . . . in medical schools, in colleges, and elsewhere. . . . It is necessary to distinguish subjects from methods. The development of propaganda shows us how lies and stupidities can be efficiently taught; and the history of schools shows us how good subjects can be badly taught. Our interest here . . . is to work out the principles by which a subject . . . can be well taught." His book ends with a declaration of the heavy but encouraging responsibility which rests on us all whenever we attempt to teach our fellow men.

## Faculty Development in Education For Family Practice

The advent of family practice as a certifiable medical discipline requires the advent of a new breed of academician. As a pioneering medical specialty, family practice is faced with securing its academic future through development of faculty with vision and capacity to be innovative, yet with practice strength and scientific acumen capable of establishing academic credibility. Certainly a new breed of student demands a new breed of mentor.

Bazum and Yonke[10] report on efforts of faculty members in the department of community medicine at the Rockford School of Medicine to improve their clinical teaching skills. Until recently no significant effort has been given to the systematic development of teaching skills by medical faculty.

In 1973 the Florida Legislature, at the urging of the Florida Academy of Family Physicians, mandated the creation of a department of family medicine in any medical school in Florida which receives state funds. There are departments of family medicine at the University of Miami and the University of South Florida and a department of community health and family medicine at the University of Florida.

The Community Hospital Education Council, Kenneth E. Penrod, Ph.D., Staff Director, was established in 1971 by the Florida Legislature through the Community Hospital Education Act (F.S. 381.503). The Community Hospital Education Council (CHEC) has responsibility for disbursement of state funds appropriated for primary care medical education. The busy men who comprise the council believe that funds can be spent effectively for faculty development, and they continually deal with the fundamental question, "How can this program, unique in our state, be directed to the greatest needs of physician manpower?"[11]

On July 31, 1978, CHEC awarded $25,000 to Hillard Jason, M.D., Ed.D., Director of the National Center for Faculty Development at the University of Miami School of Medicine. This grant was made for enhancement of medical teaching expertise in Florida. Dr. Jason plans to develop in teaching workshops in Miami a cohort of faculty who will then develop regional workshops throughout the state. These faculty development workshops will be available to medical education faculty, residents, students, and practicing physicians.

## "Special Requirements"

The first tasks in developing the new specialty of family practice dealt largely with establishment of teaching programs, recruitment of a pioneering faculty, and enrichment of a basic curricular approach to education for family practice. This phase is now far along and a second phase of further maturation is starting.

On June 26, 1978, it was announced that the Residency Review Committee, its parent bodies (i.e., the American Academy of Family Physicians, the American Board of Family Practice, and the American Medical Association's Council on Medical Education), and the Liaison Committee on Graduate Medical Education have approved the newly revised "Special Requirements for Residency Training in Family Practice." The revision became effective on February 27, 1979. The "Special Requirements" and the "General Requirements" are part of the **Essentials of Accredited Residencies**, the document which contains criteria by which all residency programs are evaluated.

"Special Requirements" emphasizes the necessity for assurance of integrated, meaningful, and coherent educational programs through the existence and availability of basic educational and patient care resources necessary to provide the family practice resident meaningful involvement and responsibility in the other major clinical specialties. Throughout these experiences, the resident must be able to maintain his identity while learning the appropriate skills, techniques, and procedures of other specialties. Also the family practice resident must have an opportunity to maintain concurrent commitment to patients whom he sees on a continuing basis in the family practice center.

"Special Requirements" speaks specifically to the necessity that residents be given sound grounding in the traditional specialties. In addition, the behavioral sciences and psychiatry are cited as essential components of family practice education programs and must be available in a continuum throughout the training years.

In a discipline which is new, as is family practice, studies establishing content and process of that new discipline provide essential background material for future research.[12] Research in family practice is burgeoning.

The family physician has several inherent advantages relating to research, including contact with all members of the family of all ages and both sexes, direct experience with primary care of unselected patients, opportunity for long-term follow-up observation of patients, multidisciplinary approach to care, and contact with patients in all stages of disease.[13]

## Discussion

The specialty of family practice is nine years old and represents a new academic discipline in health care delivery. The development of this medical discipline can be traced through its early efforts to establish residency programs, recruit faculty, develop curriculum, and achieve academic credibility. Family practice owes a debt of gratitude to general practitioners of earlier days who pioneered in the practice of person-oriented medicine.

Family physicians are being educated to manage patients and their problems in a continuing, comprehensive manner, to serve as their patients' advocates when other specialists must be used, to obviate disease by prevention, and to remain ever aware of the relationship, in disease and health, of the patient to his family.

The first phase of growth has been accomplished. To maintain academic viability, it is incumbent on leaders in family practice to enhance the quality of undergraduate, graduate, and postgraduate education for family

practice. Important factors leading to excellence in education are pioneering efforts in faculty development, continuing development of meaningful standards, and surveillance of educational programs to assure maintenance of these standards.

The document, "Special Requirements for Residency Training in Family Practice," contains criteria by which family practice residency programs are evaluated.

Research opportunities abound in family practice. Investigational studies in the biomedical and behavioral sciences and in faculty education are underway in Florida's family practice residency programs.

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**Show me a young idealist who is demanding the right to change the world he hasn't lived in long enough to know anything about it, or to contribute anything to it, and I'll show you a pest. But show me a student who "merely wishes to make a good living" and I'll show you a kid who's going to be of service to his fellowmen, because that's the only way he can make a good living.**

**Al Capp**

# Reliability of Estrogen Receptors in Predicting Hormonal Responsiveness in Treatment of Metastatic Breast Cancer

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**ABSTRACT: Estrogen receptor assays (ERA) are crucial to proper management of patients with metastatic breast cancer and may prove to be of use in the future to determine whether women at high risk of recurrence after management of their primary cancer might benefit from adjuvant hormonal therapy. While biopsy of the metastatic site for ERA is preferred obtaining an estrogen receptor assay on all primary breast cancers is also important since biopsiable tumor is often not present at the time of recurrence. The present study details results of ERA at the Comprehensive Cancer Center for the State of Florida and discusses the problem of false negative tests and the possible future importance and preliminary results of progesterone receptor assays.**

## Introduction

In 1896 Sir George Beatson identified hormone dependence in some breast cancers after obtaining remissions in two of three patients with metastases following bilateral oophorectomy.[1] Subsequently, other hormonal therapies such as adrenalectomy, hypophysectomy, and administration of hormones or hormone antagonists have shown similar success in inducing remissions in approximately 20-40% of patients treated.

In order to select those patients with metastatic breast cancer who are most likely to respond to hormonal therapy, specific hormone receptors have been sought in tumor cells. Jensen confirmed the existence of an estrogen receptor protein in the cytoplasm of breast cancer cells and its ability to predict hormonal responsiveness in the treatment of some breast cancers.[2] In addition, receptors for progesterone,[3-5] androgen,[6-8] prolactin,[6, 9, 10] insulin,[9] human growth hormone,[9] and glucocorticoids[11] have been identified in breast cancer tissues.

The purpose of this communication is to present hormone receptor results from the Comprehensive Cancer Center for the State of Florida (University of Miami School of Medicine) in a series of 112 women with breast cancer who have had estrogen receptor assays performed, along with the clinical correlations of hormonal responsiveness in 35 of these patients.

The results of these studies establish comparability of our Cancer Center's hormone receptor data with other large published series.

## Patients and Methods

### Study Population

Between June 28, 1976 and June 20, 1977, 123 tissue samples from 112 female breast cancer patients were obtained at surgery at Jackson Memorial Hospital and the University of Miami Hospital and Clinics and analyzed for estrogen receptor binding activity (ER). All but seven tissue specimens (osseous 4; omentum 2; liver 1) were obtained from soft tissue sites (breast, subcutaneous, lymph node or skin).

The clinical characteristics of the study population were obtained by chart abstraction of the medical records at these institutions.

Menopausal status was defined as follows: premenopausal women were those still menstruating at the time of biopsy or, if a hysterectomy without oophorectomy had been performed, until age 54 as outlined by the Breast Cancer Task Force (DHEW Publication No. (NIH) 77-1192). Women were considered perimenopausal from 12-

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48 months after their last menstrual period or 1-48 months following oophorectomy. These guidelines are similar to those used by Kiang and Kennedy.[12] All other patients were considered postmenopausal.

Dominant metastatic sites were assigned with the following priority: visceral [including pleura, lung (nodular or lymphangitic), liver, adrenals, ovaries, etc.], osseous, or soft tissue. The extent of disease was defined by the number of metastatic sites involved (e.g. if a patient had bone, liver, skin and lymph nodes involved the number of metastatic sites would be four).

Histopathology Review

The ratio of tumor to stroma was determined by observing at least ten microscopic fields at scanning power (objective 2.5X) and estimating the relative areas of tumor to stroma. A field composed of more than 90% non-necrotic cancer was given a maximal value of 5 relative to 1 for the remaining stroma. Likewise, a field composed of more than 90% noncancerous tissue had a tumor to stroma ratio of 1:5. A tumor to stroma ratio of 1:2 or greater was considered adequate to correlate with a reliable interpretation of the ER assay. Less cellular tumors have been reported to have spuriously low or even falsely negative values.[13,14]

Tissue Preparation and Assay Procedure

Fresh tissues were placed in wet ice after collection by a pathologist's assistant in the surgical suite within ten minutes of removal from the patient. Tumor samples were dissected free of fat and noncancerous tissue and transported to the laboratory in liquid nitrogen. At least 1cc of trimmed tissue was submitted for receptor assays. Representative portions of all the tumor masses were obtained for histologic confirmation of the presence of cancer in the tissue being sent for these assays. The samples sent for ER were then processed or stored at minus 70°C.

For processing, the tissue was shattered to a powder in the presence of liquid nitrogen utilizing a tissue crusher designed in our laboratories. The powdered tissue was then homogenized in a motor driven glass to glass homogenizer with four volumes of 10 mM Tris Buffer pH 7.4, containing 0.5 mM dithiothreitol. Usually three homogenization periods of ten seconds each followed by 50 seconds of cooling in ice were sufficient. The homogenate was then centrifuged at 100,000 x g for 30 minutes to obtain the cytosol fraction. For ER assays duplicate 150 ul cytosol samples were then treated with 50 ul of either 2.5 uM diethylstilbestrol or buffer alone and let stand for 30 minutes in an ice bath. Then 50 uL of buffer containing 2.5 nM $^3$H-17B-estradiol (Sp. act. = 115 Ci/mmole) were added to each tube, mixed and further incubated for one hour in the ice.* Following the incubation 200 ul aliquots from each tube were layered on top of 3.75 ml of a 10-30% sucrose gradient containing 10 mM KC1 and 1 mM EDTA in 10 mM Tris Buffer, pH 7.4. The tubes were then centrifuged at 249,000 x g for 18 hours at 2C.

At the end of the run fractions were collected from the bottom of the tubes and counted in a scintillation counter. The radioactivity profiles were plotted and the amounts under the 8S and 4S regions were added. The equivalent areas in the experiment with unlabelled ligand are subtracted to obtain the specific binding. The results were expressed in femtomoles of steriod bound/gm of tissue. Estrogen receptor assays were considered positive if they were equal to or greater than 150 femtomoles/gm of tissue for premenopausal women, and 700 femtomoles/gm of tissue for peri-and postmenopausal women. Values lower than these were considered negative. For progesterone receptor assays all values above 100 fm/g tumor were arbitrarily considered positive irrespective of menopausal status.

Hormonal Manipulation and Evaluation of Response

Analysis of antitumor response to the first endocrine manipulation used in 35 patients was done. Response to therapy was evaluated according to the criteria of the Breast Cancer Task Force (DHEW Publication No. (NIH) 77-1192). A disease flare was defined as a rapid, objective progression of metastatic lesions or the appearance of new lesions within one week of initiation of a new hormonal therapy.

**Table 1. — Patient Characteristics.**

| | Total No. | No. ER+(%) | No. ER-(%) |
|---|---|---|---|
| No. Patients | 112 | 57 (51%) | 55 (49%) |
| Mean Age (range) | 58 (31-88) | 60 (34-80) | 56 (31-88) |
| Race or Ethnicity | | | |
| Black | 20 | 9 (45%) | 11 (55%) |
| White | 75 | 40 (53%) | 35 (47%) |
| Cuban | 17 | 8 (47%) | 9 (53%) |
| Biopsy Site | | | |
| Primary | 53 | 27 (51%) | 26 (49%) |
| Metastasis | 59 | 30 (51%) | 29 (49%) |
| Menopausal Status | | | |
| Pre | 21 | 11 (52%) | 10 (48%) |
| Peri | 14 | 4 (29%) | 10 (71%) |
| Post | 77 | 42 (55%) | 35 (45%) |
| *Dominant Metastatic Site | | | |
| Soft Tissue | 30 | 15 (50%) | 15 (50%) |
| Osseous | 15 | 8 (53%) | 7 (47%) |
| Visceral | 14 | 7 (50%) | 7 (50%) |
| *Extent of Disease (no. metastatic sites) | | | |
| 1-2 | 39 | 20 (51%) | 19 (49%) |
| 3-4 | 20 | 10 (50%) | 10 (50%) |
| *Disease-Free Interval | | | |
| < 1 yr. | 11 | 3 (27%) | 8 (73%) |
| 1-5 yrs. | 35 | 19 (54%) | 16 (46%) |
| > 5 yrs. | 13 | 8 (62%) | 5 (38%) |

*Patients with metastatic disease

*For progesterone receptor assays 50 ul of 5 uM R-5020 (dimethyl-19-nor pregna 4, 9 diene 3, 20-dione) and 50 ul of 5nM $^3$H-R-5020 (Sp. act. = 87 Ci/mmole) were used as the unlabelled and labelled ligand respectively.

## Results

Characteristics of the overall study population are listed in Table 1. Fifty-one percent of the patients were ER positive. With respect to possible prognostic variables, there were no significant differences between ER positive and negative patients with regard to race, biopsy site (primary or metastatic lesion), dominant metastatic site, or extent of disease. In addition, although not shown in the Table, there were no differences according to disease stage in patients biopsied at the time of surgical treatment for primary disease. Differences were apparent, however, in menopausal status. Thus, while there were no qualitative differences between clearly pre-and postmenopausal patients, perimenopausal patients were less likely to have ER positive tumors.

When the 59 patients with metastatic disease were considered, no differences between ER positive and negative patients were found in extent of disease or dominant metastatic site. There was, however, a difference in disease-free interval with patients having longer disease-free intervals being ER positive more frequently.

Although 57 of 112 tissue specimens were considered ER positive by our criteria an additional nine patients had detectable ER levels. The levels of measurable estrogen receptor and its component 8S and 4S fractions in the 66 patients with detectable ER are shown in Table 2. No significant differences were noted between biopsies taken from primary or metastatic sites. Levels of ER and its 8S and 4S components in premenopausal patients were lower than in peri- and postmenopausal patients. Although perimenopausal patients were less likely to be ER positive, their mean ER levels were clearly negative or positive regardless of whether pre- or postmenopausal criteria for positivity were applied.

Of the 59 patients with metastatic disease, 35 were treated hormonally and the characteristics of this subset of patients appear in Table 3. The overall percentage of ER positive patients in this subgroup (69%) is higher than the overall series (51%). Otherwise, the characteristics of this group were similar to the overall series.

Tissue specimens from each of the 35 patients were available for pathology review for cellularity. Twenty-four of these were ER positive and 11 ER negative. Two ER positive patients and five ER negative patients had low ( 1:2) tumor: stroma ratios. These seven patients were omitted from further analyses since it is likely that the quantitative levels in ER positive patients could be spuriously low and the ER negative patients might actually have been "false negative." In this regard it is of interest to note that both of the ER positive and two of the five ER negative patients with low ratios responded to hormonal therapy.

Of the 28 evaluable patients, 12/22 (55%) ER positive patients responded to hormonal therapy (Table 4). Three disease flares were observed (two received DES and one tamoxifen therapy) in this series. One patient who rapidly progressed on DES subsequently responded to aminoglutethimide. Another, who developed a flare of her disease to tamoxifen responded to Halotestin. The other patient was placed on chemotherapy and has not yet received further hormonal therapy. Since it appears likely that a disease flare to hormonal therapy likewise demonstrates hormonal dependency of the tumor, addition of these "flares" to the hormonal responses gives an overall percentage of "hormonal dependence" among ER positive patients in the present series of 69%

**Table 3. — Characteristics of Patients Treated Hormonally.**

| | Total No. | No. ER+(%) | No. ER-(%) |
|---|---|---|---|
| No. Patients | 35 | 24 (69%) | 11 (31%) |
| Mean Age (range) | 56 (31-80) | 56 (36-77) | 58 (31-80) |
| Menopausal Status | | | |
| Pre | 11 | 7 (64%) | 4 (36%) |
| Peri | 4 | 4 (100%) | 0 |
| Post | 20 | 13 (65%) | 7 (35%) |
| Dominant Metastatic Site | | | |
| Soft Tissue | 8 | 4 (50%) | 4 (50%) |
| Osseous | 14 | 11 (79%) | 3 (21%) |
| Viscera | 13 | 9 (69%) | 4 (31%) |
| Disease Free Interval | | | |
| 1 yr. | 7 | 4 (57%) | 3 (43%) |
| 1-5 yrs. | 22 | 15 (68%) | 7 (32%) |
| 5 yrs. | 6 | 5 (83%) | 1 (12%) |
| Extent of Disease (no. metastatic sites) | | | |
| 1-2 | 23 | 16 (70%) | 7 (30%) |
| 3-4 | 12 | 8 (67%) | 4 (33%) |
| Tumor: Stroma Ratio | | | |
| > 1:2 | 28 | 22 (79%) | 6 (21%) |
| < 1:2 | 7 | 2 (29%) | 5 (71%) |

**Table 2. — Quantitative ER Levels.***

| Menopausal Status | Total Patients | Positive ER | Detectable ER | Mean ER | Mean 8S/4S |
|---|---|---|---|---|---|
| Pre | 21 | 11 | 12 | 1168 | 854/314 |
| Peri | 14 | 4 | 4 | 2068 | 1422/646 |
| Post | 77 | 43 | 50 | 1768 | 1180/631 |
| | 112 | 57 | 66 | | |

*Femtomoles/gm of tissue

**Table 4. — Hormonal Responsiveness to Endocrine Therapy (28 Pts.)**

| ER | Hormonal Manipulation | Total Patients | CR/PR | Flare | Failure |
|---|---|---|---|---|---|
| (+) | Additive | 10 | 6 | 2 | 2 |
| | Ablative | 12 | 6 | 1 | 5 |
| | | 22 | 12 (55%) | 3 (14%) | 7 (32%) |
| (-) | Additive | 2 | 0 | - | 2 |
| | Ablative | 4 | 1 | - | 3 |
| | | 6 | 1 (17%) | | 5 (83%) |

**Table 5. — Hormonal Dependence Versus Quantitative ER Levels: ER Positive Only (22 Pts).**

| Total ER | 8S Only | 8S:4S | HD*/ Total | (%) | |
|---|---|---|---|---|---|
| >1100 | >500 | >1:1 | 12/15 | (80%) | p<.2** |
| <1100 | <500 | <1:1 | 3/7 | (43%) | |

*Hormone dependent
**Chi square

(15/22). In addition, "hormonal dependence" appeared to correlate with higher quantitative ER (8S + 4S) levels, its 8S component and an 8S:4S ratio above 1 although these data were not statistically significant (Table 5).

The actual number of ER negative patients treated hormonally is low because clinical therapeutic decision making was frequently dictated by ER assay results. Only one out of six ER negative patients responded to hormonal therapy; however the one responder had a tumor which contained progesterone receptors.

Progesterone receptors (PR) were evaluated in 42 tissue specimens. Overall 18 (43%) contained detectable PR (Table 6). Only seven of these patients were evaluable for hormonal responsiveness. All three patients with detectable ER and PR responded; two out of three with ER present and no PR responded; and one without ER but detectable PR responded.

## Discussion

Estrogen receptor assays are now an accepted, standard and crucially important laboratory test in the management of patients with breast cancer. Since there are many potential variables in the performance and interpretation of these essays careful review of these variables is important before placing credence on the resultant value. In the present series proper tissue separation and handling was rigidly performed and menopausal status was meticulously defined. In addition, tumor cellularity was carefully evaluated, as poorly cellular tumors are more likely to have low or negative ER levels.[13, 14]

In general, our data were comparable to most reported series. Fifty-one percent of 112 breast cancer patients were estrogen receptor positive which is consistent with other published reports (36-75%).[4, 5, 13, 15-29] We found no difference in the prevalence of estrogen receptors between primary and metastatic lesions while others have reported a higher incidence of ER in primary lesions[8, 14, 15, 19, 21, 29, 30] a lower incidence,[26] or for this to be of no significance.[25, 30] Higher levels of ER binding capacity were found in postmenopausal women in agreement with other reports.[17, 19, 21, 25, 30] Whereas others have reported both a qualitative and quantitative reduction in ER binding in premenopausal women as compared to postmenopausal women, we could only confirm a quantitative difference.[16, 19, 28, 31] Since our criteria for ER positivity in these two groups took into account the lower levels of ER found in premenopausal women (presumably due to receptor saturation by endogenous estrogens) potential qualitative differences might have been equalized. It is interesting to note, however, that perimenopausal women appeared least likely to be ER positive, a finding which is in agreement with the findings of Kiang and Kennedy.[12]

**Table 6. — Progesterone Receptors* (42 Pts).**

| ER | PR | Total No. | (%) |
|---|---|---|---|
| + | + | 14 | (34%) |
| - | - | 16 | (38%) |
| - | + | 4 | ( 9%) |
| + | - | 8 | (19%) |

Although others have suggested that ER positive women develop osseous metastases more frequently[17] and ER negative women develop more frequent visceral metastases,[16,17] we found no differences with respect to the dominant metastatic site. We did confirm, however, the results of some investigators[14, 26, 32] who found ER positive women to have longer disease-free intervals although others have found no differences.[4, 13, 17, 31] Although it is too early to present survival data on our patients, it has been suggested by others that ER positive patients survive longer than ER negative patients.[16, 17, 26]

Published series reveal that response rates to hormonal therapy range from 35-80% in ER positive women and 0-19% in ER negative women.[13,18-29,33,34] In this series 55% (and possibly 69%) of ER positive women had hormonally sensitive tumors while only one of six ER negative women (17%) responded to hormonal manipulation. It should be noted, however, that the one ER negative patient who responded to hormonal treatment had a tumor containing progesterone receptors, a factor now felt to connote hormonal dependence. Response rates to hormonal therapy did not differ with respect to menopausal status or whether the ER status was assayed from a primary or metastatic leison. This latter point has been demonstrated by others [14,21,24] and is of practical importance since at the time of metastatic spread only about one third of patients may have lesions accessible to biopsy. All patients should have estrogen receptor assays done at the time of primary surgery so that this information will be available in the event of ultimate relapse in a patient without accessible metastatic disease.

Our use of the surcrose density gradient method of ER analysis allows evaluation of both 8S and 4S receptors. Witliff feels that measurement of only the 8S component should produce a higher degree of correlation with response to hormonal manipulation thus eliminating "false positives" obtained by including 8S + 4S receptors as in the charcoal method.[35] Kiang and

Kennedy considered only the 8S component in evaluating their clinical ER data.[12] The small number of observations in our series does not yet allow for assessment of the potential clinical importance of separating these two peaks.

Recent interest has centered around the possibility that progesterone receptors might be even more predictive than estrogen receptors for response to hormonal manipulation.[5] Although our series is too small to draw any conclusions about response to hormonal manipulation, progesterone receptors were detected in the tumor cytoplasm in 43% of our patients. This is consistent with the findings of others.[5,36-42]

## Conclusion

Estrogen (and possibly progesterone) receptor assays are now a standard, accepted and crucially important laboratory test in the management of patients with breast cancer. An assay should be performed on all patients with primary breast cancer since only one third of patients with metastatic disease may have tumors accessible for biopsy at the time of recurrence. The present paper details quality control data validating assay procedures done at the Comprehensive Cancer Center for the State of Florida and the University of Miami School of Medicine and emphasizes the value of choosing systemic therapy modalities on the basis of estrogen receptor assay results.


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# Measles Immunization

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**Abstract: The majority of cases of measles (rubeola) recently observed in the United States have occurred in individuals over ten years of age, with a peak incidence in the 15-19 year old group. This appears to be the result of a variety of kinds of vaccine failures rather than reflecting a large pool of nonimmunized individuals or those whose protective antibody levels have waned. Factors contributing to vaccine failure include (1) improper vaccine storage, (2) administration of killed vaccine just before live vaccine, (3) administration of immune serum globulin with attenuated live vaccine strains, and (4) immunization at or before 12 months of age. An immunization program aimed at the 10-21 year old population appears warranted at present.**

6th (day). The spots of the face rise a little above the skin so as to afford a perceivable roughness to the touch, and are visibly formed of many minute heads much less than a millet seed. On this day the eruption begins to appear on the arms. The fever, and restlessness, and impatience are considerably increased. The cough is very troublesome, but without any difficulty of breathing. The eyes are weak, the eye-lids are swelled. There is a total loathing of all food. Towards evening the symptoms grow worse, and with some oppression of the breath. The spots in the face are of a lively red.

William Heberden, M.D.
Commentaries on the History
and Cure of Diseases, Ch. 63 Morbilli
(Measles) London, 1802

The licensure of measles (rubeola) vaccine in the United States in 1963 created the potential for eradicating this serious disease which commanded such respect from physicians both of Heberden's era and of more recent generations. Physicians whose careers have been limited to the vaccine era may forget that measles is often a very serious disease and that complications such as otitis media, pneumonia, and encephalitis may occur, with substantial resultant morbidity and mortality. Measles encephalitis, occurring approximately once per 1,000 cases of rubeola, is a particularly severe illness.

While a 90% reduction in the reported incidence of measles has resulted from vaccine usage, it has been recognized that more than 60% of the cases of measles being reported in recent years have occurred in persons ten years of age or older, with the peak incidence in the 15-19 year age group.[1] This experience is confirmed by the recent upsurge in measles cases in Florida in late 1978 and early 1979, in which it has been shown that the average age is 14 years, with 68% of all reported cases in children 10 to 19 years of age.[2] These findings contrast sharply with prevaccination statistics which indicated that the peak incidence of measles was among preschool aged children.

It has become increasingly apparent that the present predominance of teenagers among subjects with measles is not the result of a large percentage of this age group who were never immunized or who experienced accelerated loss of vaccine-induced immunity. Rather, this appears to be a consequence of vaccine failures which are the result of vaccine practices during the 1960s. The available data point to a number of factors which contributed to vaccine failures, such as (1) improper vaccine storage resulting in virus inactivation, (2) administration of killed vaccine prior to live vaccine, (3) administration of immune serum globulin together with the presently used further attenuated (Schwarz) strain of vaccine, and (4) age at immunization. Vaccine failure as a consequence of one or more of these factors serves to explain the high level of susceptibility to measles among teenagers.

Each of these factors resulting in vaccine failure should be considered briefly.

1. **Inactivation of vaccine by improper storage.** The original attenuated Edmonston B strain of vaccine and the presently used further attenuated strain are, of course, live virus preparations. Inactivation of these live viruses may occur during shipping and storage prior to reconstitution if they are exposed to light or to temperatures not limited to between 2-8°C (35.6-46.4°F). As frequently happens, particularly in underdeveloped tropical areas of the world, administration of such inadvertently inactivated live vaccines fails to stimulate an immune response.

2. **Administration of killed measles vaccine followed shortly thereafter by live vaccine.** In the mid-1960s, when the live attenuated vaccine became available, a number of children who had received killed measles vaccine were reimmunized within several months with live vaccine. A large percentage of such individuals have been shown to have little or no protection against measles.

3. **Use of immune serum globulin (ISG) with further attenuated vaccine.** Because of the high incidence of reactions (fever, etc.) to the Edmonston B attenuated live measles vaccine, it became customary

in the 1960s to administer ISG coincident with measles vaccination in order to decrease the severity of such reactions. When this practice was continued after the introduction of the further attenuated (Schwarz) vaccine, inadequate immunity resulted because of suppression of the active immune response by antimeasles antibody in the ISG.

4. **Age at immunization.** It has been learned in the past several years that maximum seroconversion rates, i.e., rates of successful immunization, are achieved by administration of measles vaccine at approximately 15 months of age. Infants immunized at 12 months or younger (as earlier recommended) have lower seroconversion rates and less persistence of antibody when compared to those infants immunized at older ages. This is presumably due to the residual presence of small amounts of transplacentally acquired maternal measles antibody in the infant which serves to suppress the infant's active immune response to the vaccine. Current recommendations for measles vaccine administration therefore have been modified so that infants now routinely receive measles vaccine at 15 months except under special circumstances.

Thus, there now exist among the teenaged and young adult populations several subgroups with different levels of susceptibility to measles infection, depending upon their past exposure:

(a) Most individuals born before 1957 (>22 years old) have natural immunity as a result of infection with wild measles virus in childhood.

(b) Individuals under 22 years of age who were never immunized are likely to be susceptible to measles and should receive live further attenuated measles vaccine.

(c) Individuals (now mostly 11 to 17 years old) who received killed vaccine between 1963 and 1968, with or without live attenuated vaccine shortly thereafter, are likely not immune and should receive live further attenuated measles vaccine.

(d) Individuals (now mostly around 10-15 years old) who received immune serum globulin with live further attenuated measles vaccine are likely not to be immune and should be reimmunized.

(e) Individuals immunized before 12 months of age should be reimmunized.

(f) Individuals unaware of their age at immunization or who were immunized prior to 1968 with a vaccine of unknown type should be reimmunized.

With these facts and figures in mind, recommendations for measles immunization have been promulgated by the Committee on Infectious Diseases of the American Academy of Pediatrics (authors of the *"Red Book"*)[3] and by the U.S. Public Health Service Advisory Committee on Immunizations Practices[1] and are summarized as follows:

(a) A single dose of live attenuated measles vaccine (either alone or a combination product, i.e. as MMR) should be given subcutaneously. ISG should only be used if Edmonston B vaccine is used.

(b) Routine immunization of infants should take place at 15 months of age. When there is a likelihood of natural measles early in life, vaccine may be given as early as six or nine months of age, but those infants who are immunized before 12 months should be reimmunized at 15 months to insure immunity.

(c) The immune status of all adolescents should be evaluated. Those who have not been immunized during infancy, those who received killed vaccine (between 1963 and 1967), those who received live vaccine before 12 months of age, those who received live vaccine shortly after receiving killed vaccine, those who received ISG with live further attenuated measles vaccine, and those who are unaware of their vaccination history should be immunized with live further attenuated measles vaccine.

(d) Revaccination of children who received live measles vaccine between 12 and 15 months of age is optional.

(e) There is no evidence of enhanced risk from receiving live measles vaccine for those who previously received live vaccine or who had measles. Some children previously inoculated with killed vaccine may develop mild "atypical measles" on reimmunization with live vaccine; however, the risk of serious "atypical measles" from reimmunization is much less than the risk from infection with natural measles. Therefore, these patients should be reimmunized.

The "atypical measles" syndrome observed in some patients who previously received the inactivated vaccine and who are subsequently exposed to wild measles virus or, less often, to attenuated vaccine consists of an abrupt onset of high fever, tachypnea frequently with pneumonitis, edema, myalgia, prostration, and an atypical exanthem which characteristically begins on the lower extremities and progresses cephalad. This contrasts with the classical measles exanthem which begins on the forehead and spreads distally.

An intensive immunization program, particularly aimed at the teenaged population, appears warranted at this time. The resurgence of this serious disease should stimulate us to review the immune status for measles of our teenaged patients and children and prompt immunization of appropriate subjects.

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# Multiple Myeloma Presenting as Pericardial Effusion

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**Abstract: Pericardial effusion is associated with many diseases. These include bacterial, fungal and viral infections, collagen vascular diseases and various malignancies.[1] The malignancies in which the pericardial effusion is most frequent are bronchogenic carcinoma, breast carcinoma, various lymphomas and leukemia. There are isolated case reports of extraosseous plasmacytomas involving pericardium and myocardium giving rise to pericardial effusion and cardiac tamponade.[2] We describe here an unusual patient who presented with percardial effusion which was secondary to multiple myeloma.**

A 71 year old white lady was admitted to the Veterans Administration Hospital, Miami with progressively increasing shortness of breath. She had a history of hypertension for six years which was treated with alpha-Methyldopa and hydrochlorthiazide.

On admission, the patient was in mild distress. She had a paradoxic pulse with a fall in systolic blood pressure of 14 mm Hg with inspiration. Jugular venous pressure was 8 cm above the sternal angle at 45 degrees. Chest examination revealed dullness at both the bases and diminished breath sounds in the same areas. Apical beat was in the sixth left intercostal space, 2 cm outside the midclavicular line. First and second heart sounds were distant. Third and fourth heart sounds were present with no murmur. The abdomen was soft and nontender. The liver was palpable 5 cm below the right costal margin with enlargement of the left lobe which was palpable in the epigastrium. There was no shifting dullness, but bilateral pedal edema was noted.

## Laboratory Data

Laboratory data showed Hemoglobin 11.5 g%, Hematocrit 35%, and total WBC count 9,500/mm$^3$ with normal differential count. Red cells were normocytic normochromic. MCV 92 microns$^3$, MCHC 32.1%, platelet count 300,000/mm$^3$, reticulocyte count 1.7%, and sedimentation rate 100 mm/hour (corrected). Serum electrolytes were normal with anion gap of 9 mEq/liter. BUN 20 mg%, serum creatinine 0.8 mg%, serum calcium, phosphorous and alkaline phosphatase were within normal limits. SGOT 45 IU, serum LDH 335 units/ml, total serum protein 7.0 g%, Albumin 2.72 g%, alpha-1 globulin 0.23 g%, alpha-2 globulin 0.32 g%, beta-globulin 1.46 g% and gamma globulin 2.27 g%. The chest x-ray revealed cardiomegaly with prominent upper lobe veins and bilateral pleural effusions. Electrocardiogram showed sinus tachycardia with nonspecific ST-T changes.

The patient was treated with bed rest, salt restriction, digoxin and diuretics. With this treatment, there was some improvement in general condition. Bilateral thoracentesis was performed to relieve the dyspnea. The pleural fluid was a transudate with specific gravity 1.017, protein 1.9 g% and LDH 179 units/ml. The cell count was 520/mm$^3$ with 72% lymphocytes and 28% polymorphonuclear leucocytes. No atypical cells or plasma cells were noted. Cultures of the fluid were negative, and pleural biopsy did not reveal any

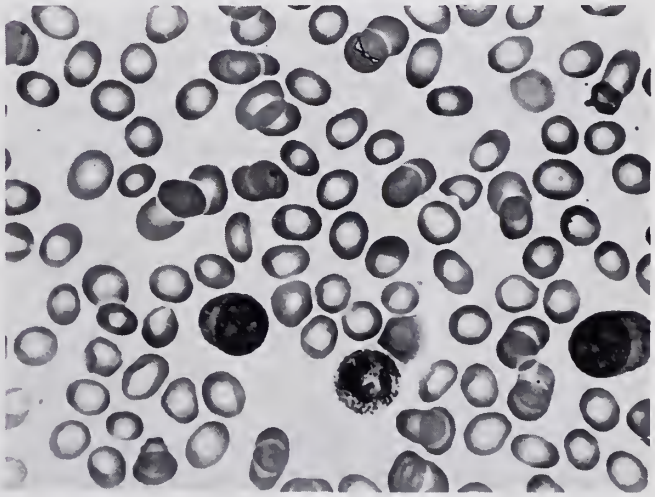

**Fig. 1: Pericardial fluid showing plasma cells. (wright's stain, x 400)**

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abnormality. After removal of the pleural effusions, the cardiac silhouette was suggestive of pericardial effusion. The presence of a pericardial effusion was confirmed by echocardiography, and pericardiocentesis was performed for diagnostic and therapeutic reasons. One hundred ml of hemorrhagic fluid was withdrawn, and on carbon dioxide contrast study the pericardial sac was normal in thickness and smooth in contour. Post pericardiocentesis chest x-ray showed normal cardiac silhouette. Pericardial fluid examination revealed a cell count of 8,000/mm$^3$ (90% plasma cells and plasmablasts - Fig. 1) and a monoclonal spike on electrophoresis (IgG 3,700 mg%) with negative cultures. Bone marrow aspiration was then performed which revealed 40% plasma cells and plasmablasts in sheets with normal erythroid and myeloid series. Serum Protein electrophoresis revealed IgG 4550 mg/ml (normal 800-1800 mg/ml), IgA 54 mg/ml (normal 90-450 mg/ml), IgM 10 mg/ml (normal 60-250 mg/ml) with increased lambda chains. IgG in serum and pericardial fluid was further subclassified and was found to be predominately $IgG_1$. Bone survey and bone scan were normal. The urine showed no Bence-Jones protein. The 24 hour urine collection revealed 32 mg% of protein (normal creatinine excretion as control), and electrophoresis did not reveal a monoclonal spike. Cold agglutinins, antinuclear antibody and PPD with intermediate strength (5 units) were negative, but streptokinase/streptodorinase (SK/SD) was positive. Both serum iron and total iron binding capacity were low. Liver scan showed Riedel's lobe with no filling defects. Thyroid functions and barium studies for gastrointestinal tract were normal. A diagnosis of $IgG_1$ lambda chain myeloma with pericardial effusion secondary to multiple myeloma was made.

Follow-up echocardiographic examination demonstrated reaccumulation of pericardial effusion, and she was treated with 1500 rads over the heart without any response. Monthly courses of chemotherapy with Melphalan and Prednisone were started. The patient received four courses resulting in stabilization of the pericardial effusion and fall in serum IgG level to 1650 mg/ml.

## Discussion

Multiple myeloma is a neoplasm of the plasma cells which are usually confined to the osseous medullary spaces, although soft tissue plasmacytomas and leukemia do occur in a small percentage of patients. There are reports in the literature describing extraosseous plasmacytomas causing cardiac tamponade, extrahepatic obstruction and invasion of the gastrointestinal tract.[2] In all these case reports, the diagnosis was made on autopsy which revealed plasma cell infiltration in the myocardium, pericardium and various other organs.[3,4,5] In our patient there were no demonstrable osseous plasmacytomas, and pericardial effusion was presumed to be due to multiple myeloma itself. The diagnosis of multiple myeloma was suspected only after abnormal plasma cells were identified in the pericardial fluid. The diagnosis was then confirmed with bone marrow examination, serum protein and immunoelectrophoresis. Marked elevation of IgG associated with decreased levels of normal IgM and IgA is frequently seen in multiple myeloma. Decreased levels of IgM and IgA are thought to be due to the diminished production rather than increased catabolism or loss. This unusual case emphasizes that multiple myeloma can be included on the list of rare causes of pericardial effusion.

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# Correction

**The name of John R. Royer, M.D., Immediate Past President of the Florida Society of Plastic and Reconstructive Surgeons was inadvertently misspelled in the August issue of *The Journal*. Dr. Royer authored an article entitled "Board Certification is a Time-Tested, Reliable Measure," which was reprinted from the Imperial Polk County Medical Association Bulletin, April 1979.**

# Inadequate Endocardial Potentials and Pacemaker Sensing Problems: Management by Drug Therapy

R. Vijayanagar, M.D., F.C.C.P.; D. A. Bognolo, M.D., F.A.C.C. and P. F. Eckstein, M.D., F.A.C.C.

**Abstract: Three cases of undersensing related to low amplitude endocardial potential were observed in a series of 138 consecutive pacemaker implantations. The competitive rhythms were successfully eliminated with the use of Propranalol and digitalis and lead repositioning avoided. Propranalol and digitalis were also concomitantly indicated in these patients for angina and mild congestive heart failure.**

With recent advances in pacemaker technology, it has become routine to measure endocardial or myocardial 'R' wave potentials. Undersensing of the patient's spontaneous rhythm has appeared as a rather infrequent problem, despite the widespread use of ventricular inhibited pacemakers (V.V.I.). Recently, attention has been focused on the detailed analysis of right ventricular endocardial electrograms, and on the potential for failure of demand pacing with small surface area electrodes.[1,2] Despite conventional measures used for optimal electrode position, the ideal methods involving measurements of "slew rates" may not be feasible in a clinical setting at a community hospital. The implanting surgeon may occasionally encounter an optimal threshold of stimulation accompanied by "low R-Wave" measurement and with consequent loss of demand function postoperatively.

We have had three patients with low 'R' wave endocardial potentials and sensing problems in the analysis of complications for 138 consecutive pacer implants (124 transvenous, 14 epicardial) Table 1.[3] The postoperative undersensing related to low amplitude endocardial potentials in these three patients were successfully managed with drug therapy using digitalis and Propranolol and lead explorations and repositioning avoided. The management of these three patients forms the basis of this manuscript. Propranolol was used to induce bradycardia and also as an anti-anginal agent and digitalis used for either mild congestive heart failure and/or for tachy-syndrome.

**Case 1.** F.O. This 75 year old white male with a diagnosis of intermittent complete heart block and angina pectoris after inferior wall myocardial infarction, was transferred to Tampa General Hospital on 12-17-75 with a temporary pacemaker in function. A permanent transvenous pacemaker was implanted using a unipolar Cordis lead (1.5 mm.) The threshold of stimulation was 0.9 volts with a current of 1.0 ma at 0.5 msec. pulse-duration. The R-wave measurement with a Medtronic 5300 PSA analyser was 2.9 millivolts. Attempts to obtain a better value were not successful. The lead terminal was connected to a C-MOS 1 Intermedics V.V.I. pulse generator. Postoperatively, pure undersensing unaccompanied by any pacing malfunction was noted. In view of the inability to obtain higher R-wave values at the time of the original implantation, it was decided not to reposition the lead. The patient was started on Digoxin .25 mg., p.o., q.d. and Propranolol 20 mg., p.o., q 6 h. The patient remained in continuous pacer capture without competitive rhythms throughout the hospital stay and

**Table 1. — Complications — Early and Late for 138 Consecutive Pacer Implants.**

| Type of Complication: | Number: | Outcome: |
|---|---|---|
| 1) Pacing of Diaphragm | 1 | Stopped Spontaneously |
| 2) Exit Block | 10<br>Unipolar: 6<br>Bipolar: 4<br>Percent: 8% | Repositioned |
| 3) Electrode Dislocation | Unipolar: 3-3.7%<br>Bipolar: 12-26.6% | Repositioned |
| 4) Myocardial Perforation | 0 | |
| 5) "Twidler Syndrome" | 1 | Untwisted & lead fixed |
| 6) Battery Erosion | 2 | Re-routed |
| 7) Runaway Pacer | 1 | Died |
| 8) Poor 'R' wave endocardial potentials | 3 | Drug Therapy |

From the Thoracic Surgical Section, Tampa General Hospital, Tampa. Requests for reprints: 1 Davis Boulevard, Tampa.

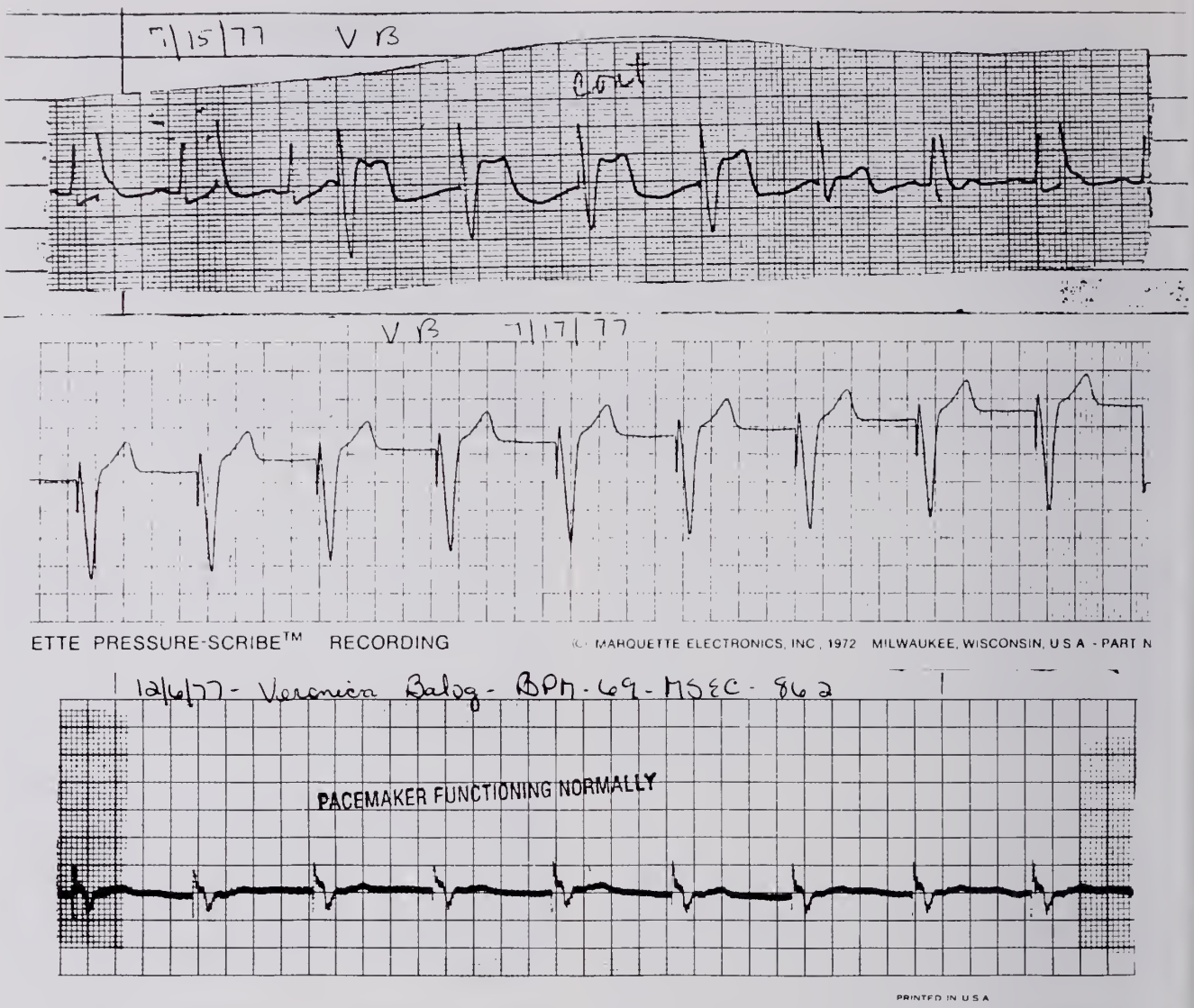


**Fig. 1, 2 and 3 — Lead II EKG showing undersensing problem with excellent pacer capture and correction with drug therapy.**

throughout the 26 months of transtelephonic and office follow-up. Interestingly, at the time of pulse generator replacement, 26 months post-implant, the R-wave measured 4.5 millivolts.

**Case 2.** V.B. This 79 year old white female was admitted on 7-14-77, two months after implantation of a permanent pervenous pacemaker, with a diagnosis of exit block. The pacer system had been implanted for tachybrady syndrome, accompanied by angina, and consisted of an Intermedics unipolar lead (1.5 mm.) connected to an Intermedics Interlith, Model 223. The patient was taken to surgery and the lead was repositioned; the threshold of stimulation was 0.6 volts with a current of 0.8 ma at 0.5 msec. pulse-duration and the best R-wave obtainable was 3.4 m. volts. .Post-operatively, normal capture, accompanied by undersensing, was controlled with Digoxin .25 mg. and Propranolol 20 mg., p.o., q.i.d. (Fig. 1, 2, 3). This patient has been followed for 13 months and remains in complete pacer capture without sensing problems and is asymptomatic.

**Case 3.** W.F. This 74 year old white male was admitted on 4-10-76 with syncope and anginal syndrome. Sick Sinus Syndrome was documented and a pacer system implanted, using an Intermedics unipolar lead (1.5 mm.) and an Intermedics C-MOS 1 lithium V.V.I. pulse generator. The threshold of stimulation was 0.5 volts with a current of 0.7 ma at 0.5 msec. pulse-duration

and the R-wave measured 4.7 millivolts. Postoperatively the pacer was found to be working in an asynchronus manner. The patient was again taken to surgery and the system explored. A CPI bipolar, large surface area 3.5 mm.) lead was then positioned in the right ventricle. The threshold of stimulation was 0.6 volts at 0.5 msec. pulse-duration and the R-wave measured 5.4 millivolts (unipolar signal off the tip electrode). Undersensing again appeared postoperatively, The administration of Digitalis 0.25 mg. q.d. and Propranolol (120 mg., q.d.) abolished the competitive rhythms. This patient has not exhibited sensing problems during the 26 month period of follow-up, and remains asymptomatic.

## Discussion

The incidence of poor amplitude endocardial potential at the time of pacemaker electrode implantation is reported to be between 3-4%.[1] With unipolar electrodes, potentials are usually greater than 5 m. volts, but lower values may be encountered in particular clinical and metabolic states such as myocardial fibrosis myocardiopathy, myocardial infarction and electrolyte imbalance.[4] Implantation of ventricular inhibited (V.V.I.) pacemakers are being performed with increasing frequency in almost every community hospital. Although attention has been focused on detail analysis of the endocardial electrograms,[1] such sophisticated facilities may not be available at the community hospital level, and high sensitivity units may not be available in that clinical setting. The physician confronted with a low R-wave at implantation, despite attempts to position the lead in several different sites in the right ventricular endocardium, should give consideration to the use of drugs to minimize competition between pacemaker induced and naturally occurring complexes in a given clinical setting. Drug therapy of undersensing, although suggested in the literature,[5] has never been reported.[6] Only in one communication, Hirsch[6] reported the successful use of Guanethidine to control a competitive rhythm in an instance of asychronous pacing. In our three cases, the administration of Digitalis and Propranolol (80-120 mg., q.d.) successfully eliminated competitive rhythms and repeated lead repositioning was avoided. It must be noted that Propranolol and digitalis were used as part of the symptomatic therapy for these three patients for angina and mild congestive heart failure as well as to suppress competitive pacer rhythms. Although the use of high sensitivity pulse generators offers a reasonable solution,[1,5] the risk of oversensing makes this modality of treatment less desirable. The use of a rate programmable pulse generator allows the non-invasive adoption of faster rates to minimize competition, but it is relatively contraindicated in patients with anginal syndrome. These three elderly patients have not been subjected to stress test or exercise to test the effectiveness of Propranolol and digitalis to suppress the competitive pacer rhythms. This was not clinically indicated. However, during a follow-up period extending to 36 months, when examined in our office at ordinary daily activities there has been a full pacer capture and these patients have been asymptomatic. We have not observed any untoward symptoms secondary to loss of atrial contribution to cardiac output in these three patients.

## References


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2. Hughes, H., Jr.; Brownlee, R., and Tyers, G.: Failure of Demand Pacing with Small Surface Area Electrodes. Circulation 54:128-32, 1976.
3. Vijayanagar, R.; Bognolo, D. and Eckstein, P.: Analysis of Acute and Chronic Thresholds and Reliability of Permanent Transvenous Pacing. J. Fla. Med. Assn. 65:571-573, 1978.
4. Johansson, D.W.: The Hemodynamic Response to Digoxin and Proscillardin During Rest Cardiology 57:126-134, 1972.
5. Chatterjee, D.; Sutton, R. and Davies, J.: Low Intracardiac Potentials in Myocardial Infarction as a Cause of Failure of Inhibition of Demand Pacemakers. Lancet 1:511, 1968
6. Hirsch, M.S., Hecht, H.H.: Guanethidine in Pacemaker Induced Parasystole. JAMA 197:151, 1966.



● Dr. Vijayanagar, 2123 West Buffalo Avenue, Tampa 33607.


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# Journal Collection Available

**William H. Bernstein, M.D., has a complete collection of the journals of *Circulation* and *American Journal of Cardiology* which he would like to donate to a non-profit community hospital or organization. The collections are bound through 1974.**

**Those interested in obtaining this collection should contact Dr. Bernstein at Mount Sinai Medical Center, Miami Beach 33140 (telephone 305/674-2185), or at 2525 Flamingo Drive, Miami Beach 33140 (telephone 305/538-1500).**

SPECIAL ARTICLES

# Report of the Commission on the Future of Florida's Public Universities

Thad Moseley, M.D.

In 1977 the Chancellor of the State University System, E. T. York, appointed a group of Florida citizens to the Commission on the Future of Florida's Public Universities. After 18 months of study and consultation the recommendations of this Commission are now available.

As expected, the need for a concentration on quality, rather than quantity is stressed and the need for fullest utilization of all physicial facilities and faculty abilities is urged. The final line in this report, however, underscores the need for the University System to have more adequate funding.

Florida suffers to an embarrassing degree upon comparison with distinguished state universities, national and sectional, when one talks of prestigious faculty; library resources; nationally recognized programs; honors student enrollment; alumni support; faculty compensation; K-12, junior college and university coordination. Each of these problems has been addressed in this report.

From these deliberations come recommendations that must be honestly considered by the people of Florida as they look to the future of our State.The need for an excellent University System is obvious if we are to grow and if we are to attract clean industry to support this growth.

Some of these recommendations follow: The university must supply a continuing educational experience for all our people. There is a need to establish programs of excellence in specific universities. We must have well prepared students at each educational level before advancing the student. The university should recognize teaching ability as an important factor in faculty evaluation. A re-evaluation of tenure is in order if we are to maintain the best possible faculty. Outstanding teachers in the State University System should be shared among the universities within the System. The universities in the State University System must establish an effective counseling, job placement, and alumni relations program. The University System must offer a challenge for our outstanding students. Instructional upgrading, library rejuvenation, and necessary equipment for departmental activities must be given immediate attention.. These and other recommendations have been presented to Chancellor York and while many can be implemented within the system, others require legislative action for implementation and funding.

To make these recommendations a reality costs money. It is essential that we as citizens of the State of Florida encourage our patients and friends to read this report and evaluate its importance. It is my belief that following study of this report you will support the recommendations, for this is an honest effort to tell Floridians that our University System needs help if it is to become an outstanding educational system.

● Dr. Moseley, 2005 Riverside Avenue, Jacksonville 32204.

# Increasing Excellence in the Public System

**E. M. Papper, M.D.**

The editorial written by Dr. Thad Moseley on the "Report of the Commission on the Future of Florida's Public Universities" deserves the serious attention of all citizens of the State of Florida.

This report points out, and Dr. Moseley correctly emphasizes that the public universities of the State of Florida, while apparently adequate for the State in quantity, require considerable bolstering to assure the kind of quality that would make the public university system comparable to those of other states.

Although opinions understandably differ on objectives, it appears to this observer that the State of Florida needs and deserves a public university system that is comparable to the excellence of the system in the State of California. Public education in that important state of the nation has assumed a leadership role that can properly be emulated and hopefully because of the many strengths in Florida, even aspired to be surpassed.

Those of us who feel that the development of an enlightened citizenry is dependent upon a strong public higher educational system also feel that there needs to be a companion program in private higher education as well. Certainly in medicine the State of Florida has been among the leaders in the nation in recognizing the value of providing generous support for its citizens to study medicine in the University of Miami as an example of a strong, private institution.

It seems entirely appropriate for those of us in the private sector, not only to support the increased excellence in the public system, but to suggest that an enhanced partnership between the two is to the interest of all of the citizens of the State of Florida.

The strengthening and extension of funding support by the State system for its sisters in the private sector can and must develop a well-rounded program of many options and great strengths for Floridians. It is my hope, in reading the report and Dr. Moseley's editorial, that we unite in the support of public higher education and also unite in appropriate funding collaboration with private institutions for the greater good of all.

● Dr. Papper, University of Miami School of Medicine, Miami.

Dr. Papper is Vice President for Medical Affairs and Dean, University of Miami School of Medicine, Miami.

# Quality Education

**William B. Deal, M.D.**

Florida, the eighth most populous state in the nation, recognized several years ago the need for accessibility of higher education to its young people. Over a short period of time, six new universities were built — geographically spread throughout the State. These fine physical plants are now in place and the university system — nine strong — is operational.

Dr. Deal is Vice President for Health Affairs and Dean, University of Florida College of Medicine, Gainesville.

Now is the time for the people to concentrate on a quality development in higher education. The future of the State resides, not solely in its climate, not solely on its natural resources, not solely on new clean industry, not solely on good roads, but on the bedrock of our future quality higher education.

Dr. Samuel Johnson, in 1763, wrote in Boswell's *Life*.

We talked of the education of children; and I

asked him what he thought was best to teach them first. "Sir, it is no matter what you teach them first anymore than what leg you shall put into your breeches first. Sir, you may stand disputing which is best to put in first, but in the meantime your breech is bare. Sir, while you are considering which of two things you should teach your child first, another boy had learnt them both."

Are we going to allow "another boy," that is, another state, to woo our young people away in pursuit of quality higher education? The Commission on the Future of Florida's Public Universities has recommended to us what our next step should be. We, the public, must respond positively or expose our bare breech.

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Dr. Hollis G. Boren, Director of the University of South Florida Medical Center and Dean of the College of Medicine, Tampa, approved Dr. Moseley's editorial but made no comment.

# Prescription Writing

The following memo regarding prescription writing was distributed to physicians licensed in Florida by George S. Palmer, M.D., Executive Director of the State Board of Medical Examiners.

Here are facts and important and pertinent information concerning prescription writing by licensed M.D.'s in Florida.

1. The term prescription means and includes an order for drugs or medicinal supplies written, signed, or transmitted by word of mouth, telephone, telegram or other means of communication by a duly licensed practitioner licensed by the laws of the state to prescribe such drugs or medicinal supplies.

2. Only licensed practitioners of the healing arts may write prescriptions and only those practitioners whose practice acts allows them to do so. Non-practitioners such as physician's assistants, nurses and other health personnel should not themselves sign a practitioner's name on a prescription even if asked to do so. This is illegal.

3. A physician should not pre-sign prescriptions for someone else to fill in. Prescriptions should be actually signed by the physician and not stamped with his/her name.

4. A physician should not prescribe, dispense, administer or otherwise prepare a legend drug, including all controlled substances other than in the course of his professional practice. Any prescribing inappropriately or in excessive or inappropriate quantities is not in the best interest of the patient and is not in the course of the physician's professional practice, without regard to his intent. A physician must keep written records justifying the course of treatment of a patient.

5. A physician is prohibited from prescribing, dispensing or administering any controlled substances (Schedule drugs) to himself. No Schedule II drugs can be prescribed by the physician for use in his office. These must be ordered on the proper forms for such issued by the Drug Enforcement Administration.

6. No schedule drugs (controlled substances) should be put on the same prescription with non-schedule drugs and controlled substances which are in different schedules should not be put on the same prescription. The best thing to do is to prescribe only one drug on each prescription blank.

7. **Generic Drug Law** — A pharmacist who receives a prescription for a brand name drug must by law unless requested otherwise by the purchaser substitute a less expensive, generically equivalent drug product for the brand name drug prescribed unless the prescriber writes the words **"Medically Necessary" in his own handwriting,** on the face of the written prescription or unless, in the case of an oral prescription, the prescriber expressly indicates to the pharmacist that the brand name is medically necessary. The words **Medically Necessary** cannot be stamped or printed on the prescription. If not written in the physician's own handwriting the pharmacist is required by law to substitute and so inform the patient.

8. The physicians' name should be legibly printed or imprinted on the prescription sheet so that the pharmacist can know who wrote the prescription. Many M.D.'s sign their name illegibly. If the pharmacist cannot identify the name of the physician or the drug and dosage he does not have to fill the prescription.

**General suggestions:** Guard your prescription pads as you do your checkbook or cash. Do not leave pads in view but keep them out of sight. Write prescriptions carefully and legibly. Don't allow yourself to be snookered and taken in by addicts and maintain a high index of suspicion with patients who give histories or stories that they require controlled substances. Be objective, not subjective when writing prescriptions. The penalty for violating laws regarding prescriptions and drugs is too great. In order to lawfully write prescriptions for schedule drugs (controlled substances) you must have a valid, current DEA registration number issued by the Drug Enforcement Administration of the United States Department of Justice.

# ORGANIZATION

# First Scientific Section Programs Announced For 106th Annual FMA Meeting May 7 - 11, 1980

**The format for the Annual Meeting is included in the Summary of the Board of Governors meeting on page 1123.**

The Florida Occupational Medical Association will participate in the 1980 Annual Meeting scientific program for the first time as an FMA-recognized specialty group.

The Association, a component of the American Occupational Medical Association, will co-sponsor a Section on Occupational Health on Saturday morning, May 10, at the Diplomat Hotel in Hollywood, according to Joseph A. Baird, M.D., of Belleair Beach, Program Chairman.

FOMA's 1980 program was among the first to be submitted to the FMA Committee on Continuing Medical Education. The scientific sessions will begin on Wednesday afternoon, May 7, and end on Saturday.

Calvin W. Martin, M.D., of Arcadia, Vice Chairman of the Committee on CME and Chairman of the Annual Meeting Program, said application will be made to the Florida Medical Foundation for co-sponsorship of the program and designation of Category I Credit for physicians who attend the sessions.

Programs submitted to date include:

## WEDNESDAY AFTERNOON—MAY 7

### SECTION ON INTERNAL MEDICINE

(Co-sponsored by American College of Physicians and Florida Society of Internal Medicine)
1:00 p.m. to 4:15 p.m., Wednesday
Michael J. Pickering, M.D., Tampa
Program Chairman

*"Physician Fitness After Fifty"*

**"Historical Aspects for Exercise After Fifty,"** Michael J. Pickering, M.D., Associate Professor and Assistant Director, Division of Nephrology, University of South Florida College of Medicine, Tampa.

**"Physiology of Aging,"** Roy H. Behnke, M.D., Professor and Chairman, Department of Internal Medicine, University of South Florida College of Medicine, Tampa.

**"Physiological Changes Due to Conditioning Over Fifty,"** Albert Kattus, M.D., Director, Cardiac Rehabilitation, Centinela Hospital Medical Center, Inglewood, Calif., and Clinical Professor of Medicine, UCLA School of Medicine, Los Angeles, Calif.

**"Physical Conditioning and Coronary Artery Disease,"** Stephen P. Glasser, M.D., Associate Professor and Director, Cardiovascular Medicine, University of South Florida College of Medicine, Tampa.

**"Exercise Program for the Physician Over Fifty,"** George Sheehan, M.D., Redbank, N.J.

## THURSDAY AFTERNOON—MAY 8

### SECTION ON CHEST MEDICINE

(Co-sponsored by Florida Chapter, American College of Chest Physicians, and Florida Thoracic Society)
1:30 p.m. to 5:30 p.m., Thursday
Wilbur G. Avery, M.D., South Miami
Program Chairman

*"Current Concepts: Pulmonary Hypertension and Pulmonary Edema"*

Moderators:

Wilbur G. Avery, M.D., Chief, Division of Pulmonary Diseases, South Miami Hospital, Miami.
Jose Landa, M.D., Associate, Division of Pulmonary Diseases, Mt. Sinai Hospital, Miami Beach.
Allan L. Goldman, M.D., Associate Professor of Internal Medicine and Chief, Pulmonary Disease Section, University of South Florida College of Medicine and Tampa Veterans Administration Hospital, Tampa.

**Introduction**—Wilbur G. Avery, M.D., Program Chairman, South Miami.

**"The Pathogenesis of Pulmonary Edema,"** Kenneth Brigham, M.D., Professor of Medicine and Director of Pulmonary Circulation Center, Vanderbilt University School of Medicine, Nashville, Tenn.

**"Clinical Aspects, Pulmonary Hypertension and Pulmonary Edema,"** Roy H. Behnke, M.D., Professor and Chairman, Department of Internal Medicine, University of South Florida College of Medicine, Tampa.

**"Radiologic Aspects, Pulmonary Hypertension and Pulmonary Edema,"** Luis Martinez, M.D., Associate Director of the Radiology Department, Mt. Sinai Medical Center, Miami Beach, and Professor of Radiology, University of Miami School of Medicine, Miami.

**"Colloid Osmotic Pressure in the Critical Care Unit,"** Charles Sprung, M.D., Chief, Medical Intensive Care Unit, and Chief, Respiratory Therapy Unit, Veterans Administration Hospital, Miami.

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## FRIDAY AFTERNOON — MAY 9

### SECTION ON NEONATAL—PERINATOLOGY

(Co-sponsored by Florida Society of Neonatal-Perinatologists)
1:00 p.m. to 5:00 p.m., Friday
Gregor Alexander, M.D., Orlando
Program Chairman

**"Asphyxia Neonatorum,"** Eduardo Bancalari, M.D., Miami.

**"Persistent Fetal Circulation,"** William Fox, M.D., Philadelphia, Pa.

**"Respiratory Intervention in the Newborn,"** Gregor Alexander, M.D., Orlando.

**"Apnea of Prematurity,"** Tilo Gerhardt, M.D., Coral Gables.

**"Patent Ductus Arteriosus,"** Jean McCarthy, M.D., St. Petersburg.

**"Transcutaneous Oxygen Monitor,"** Marsha Wagaman, M.D., St. Petersburg.

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### SECTION ON PATHOLOGY

(Co-sponsored by Florida Society of Pathologists)
1:30 p.m. to 5:30 p.m., Friday
Gabino S. Cuevas, M.D., Boynton Beach
Program Chairman

**"Cyto and Plasmaphoresis in a Community Hospital,"** Lynn Leverette, M.D., Associate Pathologist, South Miami Hospital, and Clinical Assistant Professor, University of Miami School of Medicine, Miami.

**"Ocular Pathology for the General Pathologist,"** C. Ian Hood, M.D., Professor of Pathology, University of Florida College of Medicine, and Chief of Laboratory Services, Veterans Administration Medical Center, Gainesville.

**"Sudden Cardiac Death in Athletes,"** Joe Davis, M.D., Chief Medical Examiner, Dade County, and Professor of Pathology, University of Miami School of Medicine, Miami.

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### SECTION ON RADIOLOGY (SECTION I)

(Co-sponsored by Florida Radiological Society)
1:30 p.m. to 5:30 p.m., Friday
Anthony S. Calabrese, M.D., Orlando
Program Chairman

**Welcome** — Sylvan H. Sarasohn, M.D., President, Florida Radiological Society, North Miami.

**"Pediatric Renal Neoplasia,"** David S. Hartman, Lt. Cmdr., MC, USNR, Chief, Division of Genitourninary Radiologic Pathology, Armed Forces Institute of Pathology.

**"Radiologic-Pathologic Correlation of Common Patterns of the Upper Gastrointestinal Tract: Part I,"** Joel F. Lichtenstein, Lt. Col., MC, USAF, Chief, Division of Diagnostic Radiologic Pathology, Armed Forces Institute of Pathology.

**"Radiologic-Pathologic Correlation of Common Patterns of the Upper Gastrointestinal Tract: Part II,"** Joel F. Lichtenstein, Lt. Col., MC. USAF.

**"Newer Concepts of Carotid Ultrasound,"** J. J. Crittenden, M.D., West Florida Medical Center, Pensacola.

**"Renal Cystic Disease,"** David S. Hartman, Lt. Cmdr., MC, USNR.

## SECTION ON THORACIC AND CARDIOVASCULAR SURGERY

(Co-sponsored by Florida Society of Thoracic and Cardiovascular Surgeons)
2:00 p.m. to 4:00 p.m., Friday
G. H. Welch Jr., M.D., St. Petersburg
Program Chairman

**"Different Manifestations of Sepsis in Thoracic Surgical Patients, Including Diagnosis and Treatment,"** Frank C. Spencer, M.D., Professor and Chairman, Department of Surgery, New York University Medical Center, New York, N.Y.

**"Should the Diagnosis and Postoperative Therapy for Bronchogenic Carcinoma be Managed by the Thoracic Surgeon or the Pulmonary Internist?"** (Panel)

**Moderator:** Frank C. Spencer, M.D., New York, N.Y.

**Participants:** James A. Alexander, M.D., Chief and Associate Professor, Division of Thoracic and Cardiovascular Surgery, University of Florida College of Medicine, Gainesville; Richard J. Thurer, M.D., Associate Professor of Surgery, University of Miami School of Medicine, Miami; Donald O. Weber, M.D., Assistant Professor, Department of Surgery, University of South Florida College of Medicine, Tampa.

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# SATURDAY MORNING — MAY 10

## SECTION ON RADIOLOGY (SECTION II)

(Co-sponsored by Florida Radiological Society)
8:00 a.m. to 11:00 a.m., Saturday
Anthony S. Calabrese, M.D, Orlando
Program Chairman

**"Pelvic Mass Diagnosis by Ultrasound,"** J. J. Crittenden, M.D., West Florida Medical Center, Pensacola.

**"Radiological-Pathological Correlation of Renal Neoplasia: Part I,"** David S. Hartman, Lt. Cmdr., MC, USNR, Chief, Division of Genitourinary Radiologic Pathology, Armed Forces Institute of Pathology.

**"Radiological-Pathological Correlation of Renal Neoplasia: Part II,"** David S. Hartman, Lt. Cmdr., MC, USNR.

**"Gastrointestinal Polyposis Syndrome,"** Joel E. Lichtenstein, Lt. Col., MC, USAF, Chief, Division of Diagnostic Radiologic Pathology, Armed Forces Institute of Pathology.

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## SECTION ON OCCUPATIONAL HEALTH

(Co-sponsored by the Florida Occupational Medical Association)
8:00 a.m. to 12:00 noon, Saturday
Joseph A. Baird, M.D., Belleair Beach
Program Chairman

### *"Occult Trauma"*

**Welcome** — Frederick C. Andrews, M.D., President, Florida Occupational Medical Association, Mount Dora.

**"Health Hazards in the Worker's Environment,"** John S. Jacoby, M.D., Medical Director, Honeywell, Inc., Minneapolis, Minn.

**"Occupational Health Hazards Among Farm Workers,"** Jack Griffiths, Ph.D., Department of Epidemiology, University of Miami School of Medicine, Miami.

**"Retrospective Study on Lung Cancer"** (Speaker to be announced)

**"Thousand-year-old Cancer: Is It Possible?"** (Speaker to be announced)

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## SECTION ON DERMATOLOGY

(Co-sponsored by Florida Society of Dermatology)
8:15 a.m. to 12:15 p.m., Saturday
William H. Eaglstein, M.D., Miami
Program Chairman

**Welcome** — Henry Menn, M.D., President, Florida Society of Dermatology, Miami.

**"Cancer and Psoriasis Patients and PUVA,"** Kenneth M. Halprin, M.D., Professor of Dermatology, University of Miami School of Medicine, Miami.

**"Retinoids and Cancer,"** Marilynne McKay, M.D., Dermatology Resident and Research Fellow, University of Miami School of Medicine, Miami.

**"Experiences Treating Herpes,"** Kenneth Mehr, M.D.

**"Lithium and the Psoriasis Patient,"** John J. DiGiovanna, M.D., Dermatology Resident, University of Miami School of Medicine, Miami.

**"Radiotherapy and Skin Cancer,"** Robert S. Tomsick, M.D., Fellow in Chemosurgery, University of Miami School of Medicine, Miami.

**"Infestations of Childhood,"** Lawrence Schachner, M.D., Assistant Professor of Dermatology, University of Miami School of Medicine, Miami.

**"Recurrent Clear Cell Hidradenoma,"** Neal S. Penneys, M.D., Associate Professor, and Alexander Kowalczyk, M.D., Dermatology Resident, University of Miami School of Medicine, Miami.

SECTION ON MANAGEMENT OF PRIMARY BREAST CANCER
(Co-sponsored by Florida Society of Clinical Oncologists)
8:30 a.m. to 10:30 a.m., Saturday
Charles L. Vogel, M.D., Miami
Program Chairman

**"Is Radical Surgery Really Necessary?"** Everett V. Sugarbaker, M.D., Associate Professor of Surgery and Oncology, University of Miami School of Medicine, Miami.

**"The Role of Definitive Radiation Therapy,"** Jay R. Harris, M.D., Assistant Professor of Radiation Therapy, New England Deaconess Hospital Joint Center for Radiation Therapy, Harvard Medical School, Boston, Mass.

**"Systemic Adjuvant Therapy Update,"** Charles L. Vogel, M.D., Chief, Division of Breast Cancer, Comprehensive Cancer Center for the State of Florida, and Associate Professor of Oncology, University of Miami School of Medicine, Miami.

**"Breast Reconstruction,"** Walter R. Mullin, M.D., Clinical Assistant Professor of Plastic Surgery, University of Miami School of Medicine, Miami.

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SECTION ON ALLERGY AND IMMUNOLOGY
(Co-sponsored by Florida Allergy Society)
8:30 a.m. to 12:00 noon, Saturday
Ira Finegold, M.D., Hollywood
Program Chairman

**Welcome** — Ira Finegold, M.D., Vice President, Florida Allergy Society, Hollywood.

**"Relationships of Asthma and Gastroesophageal Reflux,"** Mark R. Stein, M.D., Clinical Assistant Professor of Medicine, University of South Florida College of Medicine, Tampa.

**"Complement Advances and Clinical Application,"** Duane R. Schultz, Ph.D., Associate Professor of Medicine, University of Miami School of Medicine, Miami.

**"Current Insect Sting Immunotherapy,"** Richard F. Lockey, M.D., Associate Professor of Internal Medicine, University of South Florida College of Medicine, Tampa.

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SECTION ON PHYSICAL MEDICINE AND REHABILITATION
(Co-sponsored by Florida Society of Physical Medicine and Rehabilitation)
10:00 a.m. to 12:00 noon
Hector A. Freytes, M.D., Miami
Program Chairman

**"The New Development in Electrotherapy of Pain, Spasms and Spasticity,"** W.T. Liberson, M.D., Ph.D., Brooklyn, N.Y.

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# FMA Petitions Worker's Compensation For Fee Revision

The Florida Medical Association, on behalf of its approximately 12,500 members, filed on Friday, October 5, 1979, a petition with the Division of Worker's Compensation, Department of Labor and Employment Security, for an amendment to the existing rule that relates to medical and surgical fee schedule under the Florida Worker's Compensation Act.

The medical and surgical fee schedule presently in use was originally adopted in 1975. At that time, fees and charges allowed under the rule were substantially less than the charges that prevailed in the same community for similar treatment of injured persons. Moreover, during the ensuing four years inflation, other economic factors, and changes in medical treatment and procedures have contributed to the inadequacy of the current fee schedule. Accordingly, it is the position of the Florida Medical Association that the existing fee schedule does not now meet the requirements of and is in violation of the statutory requirements of the Worker's Compensation Act.

This action was initiated after careful review of the elected officers of this organization and the authority directed to those officers by the House of Delegates. It is anticipated that the Division of Worker's Compensation will initiate a hearing on this matter within the thirty-day time requirement provided by law.

# Health Communicator Award Presented To FMA Secretary Robert Windom

The Public Relations Council of the Florida Hospital Association has presented its 1979 "Health Care Communicator of the Year" award to FMA Secretary Robert E. Windom, M.D., of Sarasota.

Dr. Windom, an internist, was cited particularly for producing and hosting a series of weekly medical television programs aired by Sarasota's Channel 40. In the last three years, Dr. Windom and the Sarasota County Medical Society have produced more than 120 half-hour programs covering such topics as "How To Choose a Doctor" and "Preventive Dentistry." Tapes of the programs also are shown through closed circuit facilities to patients at Sarasota Memorial Hospital.

Dr. Windom also has participated in public forums on health care topics, appeared on radio programs and worked with journalists researching articles.

The award is given annually by the FHA/PR Council to the individual who in its judgement has done the most in the State toward informing the general public on health care matters. Dr. Windom received the 1979 award from Council Awards Chairman Jerry Kinder of Venice at the Council's Annual Meeting in St. Augustine on September 20.

**Dr. Windom (right) receives Health Communicator of the Year Award from Mr. Kinder.**

# FMA Inaugurates Jail Health Project

The Florida Medical Association has joined the AMA in a program designed to upgrade the health care facilities of jails in Florida.

Inauguration of the project was announced by FMA President Richard S. Hodes, M.D., in Tallahassee on July 31, 1979.

"This is only the beginning," Dr. Hodes said. "We hope that the lessons we learn in the initial stages of our program will eventually be applied to the accreditation of every jail in Florida. No inmate should suffer because of lack of health care."

The pilot program in Florida will concentrate on 10 jails selected from among those responding to a questionnaire regarding health care delivery for inmates.

Florida's efforts are based on a program established by the AMA in 1976, in which 22 other states now participate. The program will work to bring the jails up to the level of care determined to be acceptable through standards set by the AMA. The program was initiated in the wake of a survey conducted jointly by the AMA and the American Bar Association which revealed that most U.S. jails had either inadequate or even non-existent health care facilities. Inmates were treating inmates and were suffering needlessly.

The AMA Jail Health Program was funded in the early stages by the Law Enforcement Assistance Administration (LEAA) of the U.S. Justice Department which provided three separate year-long grants for the research and compilation of standards. The AMA was recently awarded a fourth grant, for $1,296,460 which will be used to encourage the widespread adoption of standards for jail health and provide technical assistance to those jails working toward accreditation of their inmate health care facilities.

The amount of funds allotted to Florida for the 11-month study totals $40,026 which will be administered by the Florida Medical Foundation.

# Journal Wins Top Florida Magazine Association Honors

*The Journal of the Florida Medical Association* swept the "Best Special Issue" category in the 23rd Annual Florida Magazine Association Contest. Associate Editor Richard C. Dever, M.D., of Jacksonville, attended the Association's convention September 8, at Fort Lauderdale's Bahia Mar Hotel.

Dr. Dever accepted the first place plaque for the Special Issue on Orthopedic Surgery (January 1979) and the second place award for the Special Issue on Otolaryngology (September 1978).

The Special Issue on Orthopedic Surgery was published in cooperation with the Florida Orthopedic Society, with Joseph C. Flynn, M.D., of Orlando, and Ronald J. Mann, M.D., of Miami, serving as Guest Editors. The contest judges offered these comments about the issue in the critique book:

"This special issue on orthopaedic surgery is notable in its coverage. Excellent illustrations abound Cover is strong and inviting. Contents show a wide variety and authors show distinction. This is truly what a special issue is about. It is jam-packed with material that must be of interest to the physician-reader."

Troy H. Hutchinson II, M.D., of Lakeland, served as Guest Editor of the Special Issue on Otolaryngology on behalf of the Florida Society of Otolaryngology.

The judges critqued the issue thusly: "This special issue is another laudable compendium of a wide variety of otolaryngology-related articles. It is well illustrated with black and white photography, artist drawings and charts. The use of color on pages 750-751 adds greatly to the detail. This is another special issue that any state medical association could publish with pride."

Also entered in the contest were special issues on Nutrition (April 1979) and on FMA Programs (February 1979). While they were not cited, the judges did comment favorably.

"This special issue on nutrition is interesting, has a wide variety of articles, a pleasing cover, and pleasing typography. It has two areas where improvement could have been made — one easily and inexpensively, the other more difficult and costly. The charts and tables accompanying the articles on pages 378-389, 391, 394 would have been improved using higher quality typography such as used on pages 352-355, 359-363. While illustrations, either photographic or artist-produced, would have been more difficult in this issue than in some others, there are many areas where such illustrations would have clarified the material — and certainly would have made for a more pleasing and interesting look."

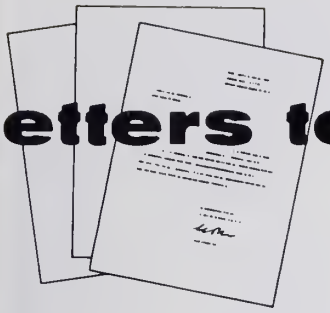
The FMA Ad Hoc Committee on Nutrition served as the guest editorial board for this special issue. Lewis A. Barness, M.D., of Tampa, was Guest Editor.

FMA Secretary, Robert E. Windom, M.D., of Sarasota, served as Guest Editor for the FMA Programs Issue.

The judges comments were: "This special issue is different from the other three FMA Journal entries. While the others are technical and professionally oriented to the practice of medicine, this issue is a major public relations effort. As such, its impact is different from the others; however, in its way, it may be quite as valuable to its readers as any other single issue. Certainly it has significant educational value, citing the FMA programs. It adequately serves as a sort of "Annual Report" on the organization. The cover is clever and has eye-appeal while maintaining a simple uncluttered look. The reader could have no doubt on the issue's thrust and theme just by a quick look at the cover. Major defect is the absence of illustrations, needed badly to break up the mass of gray pages."

In addition to garnering the top two honors in the "Best Special Issue" category, *The Journal* was awarded a certificate of merit in the General Excellence category (non-profit association publications with circulation under 20,000). First place in this category was presented to the Florida Cattleman, and second place went to the Florida Food Dealer.

The judges' comments regarding *The Journal* were: "A handsome publication, but some originality needs to be brought into the layout and general design of the magazine. Avoid filling up a page - which has run out of story - by just sticking in a quote or two. This leads to unprofessional-looking design. Some excellent use of photography, but the graphics — charts, graphs, diagrams — need to be of consistent high quality. Body type very readable, well set, well spaced."



# Letters to the Editors

## NUTRITION ISSUE PRAISED

**To the Editor:** Enclosed is a check for $2.50 for the Special Issue on Nutrition (April 1979). I saw a copy of the above in a doctor's office and was so impressed that I sent for it.

I am just a layman interested in nutrition and found *The Journal's* articles most interesting and informative...

The average American knows very little about the subject of nutrition, and a journal such as published by the Florida Medical Association is authentic.

*Jerome A. Hodes*
*West Palm Beach*

## AMSA THANKS FMA

To: *Harold W. Parham, D.H.A.*
*Executive Vice President, FMA*
*Jacksonville*

**Dear Sir:** On behalf of the University of Miami's chapter of the American Medical Students Association (AMSA) I would like to thank you very much for your financial support this past year. We are very proud of our organization. The Miami Chapter has a reputation as one of the most active in the country including more than 85% of the student body.

AMSA has always maintained close relations with local and national organizations. Its Student Business Section plays an active role with the AMA on a national level. At home a student from the Miami Chapter attends Dade County Medical Association (DCMA) Executive Committee meetings on a regular basis. This year we will make every effort to establish a firm and continuing relationship between the FMA and AMSA.

*Dennis Mayeaux*
*AMSA President*
*Miami*

## HISTORICAL ISSUE LAUDED

*William M. Straight, M.D.*
*Historical Editor*

**Dear Bill:** Congratulations on the Historical Issue of *The FMA Journal.* I think it is an outstanding publication. I particularly enjoyed Dr. Augusto Fernandez-Conde's narration of his entrance into the United States and your biography of Webster Merritt. I had the privilege of knowing Webster from the time I was in Medical School until his death. Your article was most interesting.

With every good wish, I am

Sincerely,
*Burns A. Dobbins, M.D.*
*Ft. Lauderdale*

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**Integrity without knowledge is weak and useless and knowledge without integrity is dangerous and dreadful.**

**Samuel Johnson**

# Medical News Around the State

Dr. Boothby

**Richard J. Boothby, M.D., of Jacksonville**...has been asked to address a group of perinatal health care providers and state and federal officials involved in perinatal legislation who have been called to the United Nations to discuss problems in perinatal health care and legislation. Dr. Boothby's presentation will be in conjunction with United Nations programs relating to the International Year of the Child on November 9, 1979, in the United Nations Building, New York City. Florida is considered a leader in the area of perinatal educational programs, and has been successful in reducing infant mortality rates through educational programs for both medical professionals and the public. Dr. Boothby is Pediatric Co-Director of the Education and Staff Training Component of the Florida Perinatal Intensive Care Program, in addition to operating a private practice.

Dr. Connar

**Richard G. Connar, M.D., of Tampa** . . . has been re-elected to the Council on Medical Education of the American Medical Association. Dr. Connar was continued on the Council by the AMA House of Delegates, which met in Chicago in July.

A native of Zanesville, Ohio, Dr. Connar received his M.D. degree from Duke and has been active in professional affairs at the state and national levels for many years. He has served as an AMA Delegate or Alternate Delegate from Florida since 1971.

**W. Harold Parham, D.H.A.** . . . Executive Vice President of the Florida Medical Association, has assumed additional duties as President of the Florida Physicians' Insurance Reciprocal.

Dr. Parham was one of the Reciprocal's organizers and has served as Attorney-in-Fact since its inception. The Reciprocal, Florida's largest underwriter of physicians' malpractice insurance, was organized and sponsored by the FMA to provide insurance coverage for Florida physicians during the medical malpractice crisis of the middle 1970s. It currently covers more than 6,600 physicians.

"Dr. Parham is one of the most knowledgeable executives in the medical malpractice field in this state and the nation," according to Vernon B. Astler, M.D., Chairman of the Reciprocal Board. "He has demonstrated his corporate ability time and again during our formative years."

Professional Insurance Management Company (PIMCO) will continue as the Reciprocal's management company.

**Three Florida physicians** . . . have been elected to office in the Southeastern Society of Plastic and Reconstructive Surgeons at its Annual Meeting at Sea Island, Georgia.

Joel Mattison, M.D., of Tampa, is the group's Vice President. James M. Carraway, M.D., of Winter Park, was named Historian, and Thomas J. Zaydon, M.D., of Miami, was elected as Trustee.

With 388 members in 11 states, the Southeastern Society is the largest regional plastic surgery group in the United States.

**Two University of Florida pathologists** . . . have been announced as recipients of Southern Medical Association Research Project Awards.

The recipients and the titles of their research are: Nancy L. Lammert, M.D., "Immunoperoxidase Identification of Pancreataic Islet Cells in Normoglycemic and Hypoglycemic Infants"; and Frederick J. Schoen, M.D., "Mandril Selection for Small Blood Vessel Grafts Derived from Foreign Body Reactive Tissue."

**Maj. Gen. Gordon Duqueman and Mrs. Lynda Edwards pin Brigadier General stars on Dr. Thomas S. Edwards.**

**The U.S. Senate has confirmed President Carter's appointment of Thomas S. Edwards**...to Brigadier General, U.S. Army Reserve.

Edwards commands the 818th USAR Hospital Center, Forest Park, Georgia. In civilian life, Dr. Edwards has a private ophthalmology practice in Jacksonville.

The 51-year-old native of Jacksonville earned his M.D. from Tulane University in 1950, and did post-graduate work at New York University Post-Graduate School of Medicine.

In the field of ophthalmology Dr. Edwards has published over 20 medical articles and participated in numerous seminars. He has been awarded an "A" rating by the Surgeon General, the highest rating obtainable.

Edwards' military career spans 29 years. He is a graduate of the Medical Department General Staff, Army's Command and General Staff College and the Army War College. The General's professional and civic activities include affiliations in the Florida Medical Association, the AMA, Reserve Officers Association, Rotary Club of South Jacksonville, and the Mandarin Rotary Club, of which he was Charter President. He has served as Speaker of the House of Delegates for the American Association of Ophthalmology.

The Army Reservist's awards include the Meritorious Service Medal and three battle stars for combat service in the Korean War.

**William F. Enneking, M.D., of Gainesville** . . . has been elected President of the American Board of Orthopedic Surgery. Dr. Enneking is Professor and Chairman of the Department of Orthopedic Surgery at the University of Florida College of Medicine.

**Five Florida Physicians** . . . have been elected to Fellowship in the American College of Cardiology. C. Richard Conti, M.D., of Gainesville, the College's Governor for Florida, identified them as:

Charles L. Byrd, M.D., Miami Beach; Jonathan R. Jaffe, M.B.Ch.B., Hollywood; Leonardo V. Lopez, M.D., Miami; James L. Mason, M.D., St. Petersburg; and Harvey Tritel, M.D., Fort Myers.

**Robert H. Reeves, Ph.D.** . . . has been appointed Director of Florida's Program in Medical Sciences (PIMS).

PIMS is a program for medical students operated with the cooperation of Florida State University and Florida A&M University, both in Tallahassee, and the University of Florida College of Medicine in Gainesville.

Certain students take the equivalent of the first-year medical curriculum in Tallahassee, then matriculate at Gainesville at the second-year level.

A former Assistant Professor in the Department of Chemistry at FSU, Dr. Reeves most recently was Associate Professor of Microbiology at the University of Tennessee Center for the Health Sciences. He earned his Ph.D. in biochemistry from New York University.

**The Greater Miami Pediatric Society**...has elected officers for the 1979-1980 year. Elected to serve as President is Gary M. Bong, M.D., F.A.A.P., and Jose Strauss, M.D., will serve as President-Elect. Mary Harkness, M.D., F.A.A.P., will serve as Secretary and Rafael Bejar, M.D., F.A.A.P., was elected Treasurer.

**Dr. Nikolaus**

**Donald G. Nikolaus, M.D., of Dunedin**...has been elected to the Board of Directors of the American Academy of Family Physicians.He was chosen at the meeting of the AAFP Congress of Delegates in Atlanta in October.

A native of Ohio and a graduate of the Ohio State University College of Medicine, Dr. Nikolaus has been active in medical organizational work in Florida. He is a former member of the Board of Governors of the Florida Medical Association, and a Past President of both the Pinellas County Medical Society and the Florida Academy of Family Physicians.

In 1978, Dr. Nikolaus was one of the finalists in *Good Housekeeping's* "Family Doctor of the Year" program. In the AAFP he has been a member of the Commission on Public Health and Scientific Affairs.

# Book Reviews

Book Review Editor

F. Norman Vickers, M.D.

**The Honolulu Marathon** by Mark Osmun. 250 Pages. Price $12.95. J.B. Lippincott, Company, New York, 1979.

Mark Osmun, a former newspaper reporter and free lance writer relates his experiences about the mystique, trials and tribulations of marathon running.

He starts the book with an explanation of the cardiology orientation exercise programs of Dr. Jack Scaff which in effect brings people from a state of physical oblivion back to health. It is of some note that 95 percent of the people who undertake Dr. Scaff's program, regardless of their prior physical abilities, end up completing a marathon in Hawaii -- "The Honolulu Marathon". The book is somewhat anecdotal in the opening chapters, but of note, there are some very interesting stories from the standpoint of a running enthusiast. These include Val Nolasco, the first heart attack marathoner; Harry Cordellos, the blind marathoner; and the Hunkey bunch, an entire family of marathon and distance runners who have set many world records.

The second portion of the book deals with the transition of Mr. Osmun from a reporter and freelance writer to a runner. During the course of this portion, one cannot help but feel the wild enthusiasm and drive which Mr. Osmun acquires; this enthusiasm leads him to join, compete and complete in his first marathon in Honolulu. He characterizes this in several ways. He states, "For me, the act of writing, like the act of running, like any activity, must be worth while in itself or it's foolish to be involved in it." He reports some of his feelings about Dr. Scaff and Scaff's feelings which infected him and caused him to surrender to the same emotion: "'I can't beat this guy.' And you can't. You can't beat the marathon. But he says, 'I just want to finish. Let me go the distance.' And that's what you're shooting for in the marathon - to finish, to take a shot and find out how good you really are."

For the runner who is accomplished, I feel the book is somewhat perhaps elementary. For the runner who is interested in running for the sake of pure enjoyment and doesn't have too much experience, the anecdotes and enthusiasm that Osmun portrays in his literary style are infectious, and well worth the short time it takes to read the book. For a person who has never run a marathon and is interested in doing it, to read about Osmun's training program and the emotions involved, is an invaluable experience. For those who may have run one or several marathons, it would be my feeling that this book is of little value other than its interest and the experience of learning more about Mr. Osmun and Dr. Scaff.

All in all, this is an excellent book for someone who is running and thinking of going into a marathon, or someone who is just beginning running, and feels like they would like to go "that extra distance."

James B. Perry, M.D.
Fort Lauderdale

———

Dr. Perry is a running enthusiast who has competed in several marathon runs.

**Brain Surgeon,** Lawrence Shainberg, 276 Pages. Price $10.95, J.B. Lippincott Co., Philadelphia & New York, 1979.

*Brain Surgeon* is a commentary on the four-month odyssey Mr. Shainberg took through the world of neurosurgery at the side of a nationally renowned neurosurgeon. True to form, the neurosurgeon, Dr. Brockman, or "The Boss" as he is called to disguise his true identity, is viewed as a man who comes to his task armed with intense physical and cognitive resources, while suffering the pains of long hours in the operating room and the sacrifice of personal time required to run a busy practice, research center and residency training program. Solely dedicated to surgery and his own world view, the surgeon rents a rarely used apartment within the shadow of the hospital; frequently crisscrosses the country and globe to disseminate his knowledge and influence; and administrates with the same keen judgement and unreproachable stature that he operates with in the surgical theater.

The author accompanies "The Boss" from early morning rounds to delicate surgical procedures. To his credit, Shainberg accurately correlates patients'

symptoms and signs to functional anatomy in a manner that is both entertaining and educational. To complete the picture, the surgeon's darker side is unveiled: his failures, his profane language, and the relentless tirades against a job less than well done. Stressful, but humorous encounters between "The Boss" and his residents strike a common chord with situations shared by all physicians during their residencies.

The author does not stop with this singular portrait of the surgeon, however. The patient is central to the questions, problems and human drama to which the surgeon addresses himself. Unnervingly, the author crosses the frontier of the expectations and fears with which the patient and his family face the unknown: surgery, life after surgery and for some, an untimely death. Curiously, he reveals many patients as detached from their diseases and fates. As outsiders looking in, they manipulate their surroundings and help guide their friends and relatives through the pain of loss and resentment.

Ultimately, the drama and interest of the book revolve around the central issue: the brain. Mr. Shainberg enters the world of neurosurgery with a philosophic naivete that must before long give way to concepts forged in the blood and sweat, hopes and fears of physician and patient alike. The dilemma of separating the mind and brain cannot be resolved on the operating table and, as the author learns, the surgeon, out of necessity, withdraws to a safer region where brain becomes tissue. There effective surgical intervention is possible.

*Brain Surgeon* gives insight into the daily excitement, crises and frustrations of all surgeons; it is excellent reading for anyone, inside or outside of medicine, but especially for families and friends of practicing surgeons.

John L. Grant, M.D.
Richard H. Jackson, M.D.
Bruce Woodham, M.D.
Albert L. Rhoton Jr., M.D.
Division of Neurosurgery
University of Florida Health Center
Gainesville, FL 32610

# Books Received

**Receipt of the following books is acknowledged. Medical readers interested in reviewing particular books are invited to address requests to the Book Review Editor. Following acceptance of a written review for publication, a reviewer may then retain the book reviewed for his personal or favorite library.**

**The Chemistry of Human Behavior** by Herbert L. Meltzer, Ph.D. 261 Pages. Illustrated. Price $17.95 (cloth). Nelson-Hall Publishers, Chicago, 1979.

**Cry Babel, The Nightmare of Aphasia and a Courageous Woman's Struggle to Rebuild Her Life** by April O. Armstrong. 252 Pages. Price $8.95. Doubleday & Company, New York, 1979.

**Annual Review of Neuroscience** with 31 contributing authors. 555 Pages. Annual Reviews, Inc., Palo Alto, California, 1979.

**Norethindrone, The First Three Decades** edited by Mary Jean Pramik. 100 Pages. Syntex Laboratories, Palo Alto, California, 1978.

**Family Health in an Era of Stress** conducted by Yankelovich, Skelly and White, Inc. 192 Pages (plus packet). General Mills, Inc., Minneapolis, Minnesota, 1979.

**Correlative Neuroanatomy & Functional Neurology, 17th Edition,** by Joseph G. Chusid, M.D. 464 Pages. Illustrated. Price $12.00. Lange Medical Publications, Los Altos, California, 1979.

**Instructions for Parents** by Matthew M. Cohen, M.D. 232 Pages. Price $22.50. Appleton-Century-Crofts, New York, 1979.

**Review of Allied Health Education: 3,** Joseph Hamburg, General Editor. 161 Pages. Price $7.50. The University Press of Kentucky, Lexington, Ky., 1979.

**Family Health and Home Nursing,** American National Red Cross. 626 Pages. Illustrated. Price $3.95. Doubleday & Company, Inc., New York, 1979.

**Review of Medical Physiology, 9th Edition,** by William F. Ganong, M.D. 618 Pages. Illustrated. $14.00. Lange Medical Publications, Los Altos, California, 1979.

**Stop Forgetting** by Dr. Bruno Furst. 340 Pages. Price $5.95. Doubleday & Company, Inc., New York, 1979.

**How To Improve Your Child's Behavior Through Diet** by Laura J. Stevens and Rosemary B. Stoner. 346 Pages. Price $9.95. Doubleday & Company, Inc., New York, 1979.

**Child Guidance** by Samuel Kahn, M.D., Ph.D., F.R.S.H. 134 Pages. Price $10.00. Philosophical Library, Inc., New York, 1979.

**Current Surgical Diagnosis and Treatment, Fourth Edition** by J. Englebert Dunphy, M.D., and Lawrence W. Way, M.D. 1162 Pages. Price $19.00. Lange Medical Publications, Los Altos, California, 1979.

**The Vitamin Book** by Rich Wentzler. 224 Pages. Price $4.95. Doubleday & Company, Inc., New York, 1979.

**The Truth About Senility — And How To Avoid It** by Lawrence Galton. 244 Pages. Price $9.95. Thomas Y. Crowell Company, New York, 1979.

# Christmas Seals by children for children.

When American schoolchildren create paintings for use on Christmas Seals, or when youngsters such as these 11-year-olds recreate the designs in three dimensions, that's a learning experience.

Christmas Seals provide other, valuable lessons for kids. They help those with asthma learn to cope with their disease. To lead normally active lives.

Give to Christmas Seals. It's a matter of life and breath®.

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75th Anniversary
The "Christmas Seal" People®

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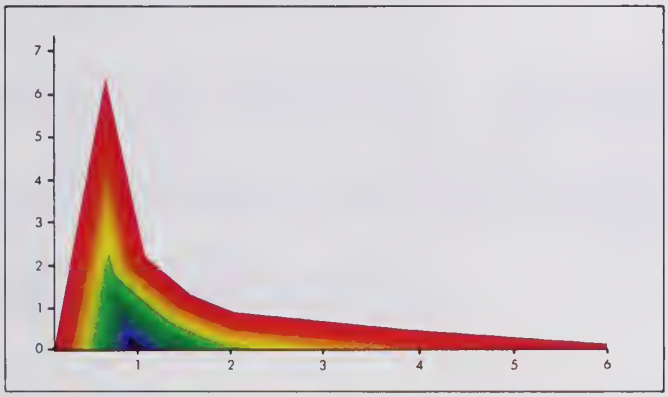
# more than just spectrum

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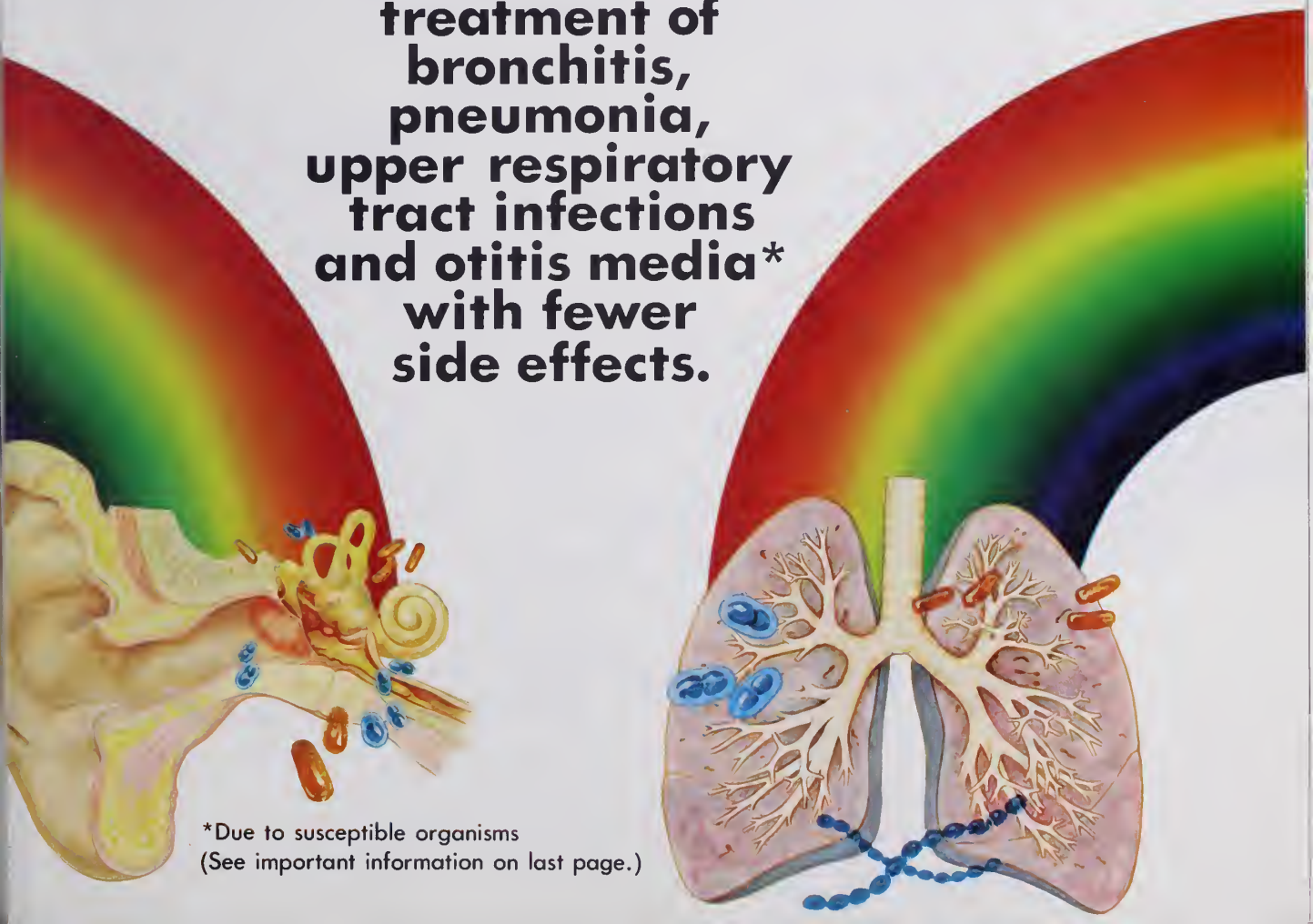
## (cyclacillin) Tablets/ Suspension

**Efficacy proven in the treatment of bronchitis, pneumonia, upper respiratory tract infections and otitis media* with fewer side effects.**



*Due to susceptible organisms
(See important information on last page.)

# New CYCLAPEN®

## (cyclacillin) Tablets/ Suspension

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# ampicillin confirmed i
# studies of 2,58

Rapid, virtually complete absorption from GI tract

Rapid onset of action—mean peak serum levels within 30 minutes

Exceptionally high peak blood levels—3 times greater than ampicillin (clinical efficacy may not always correlate with blood levels)

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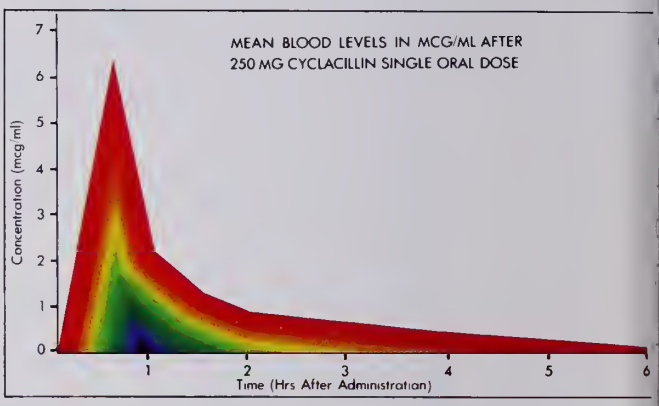
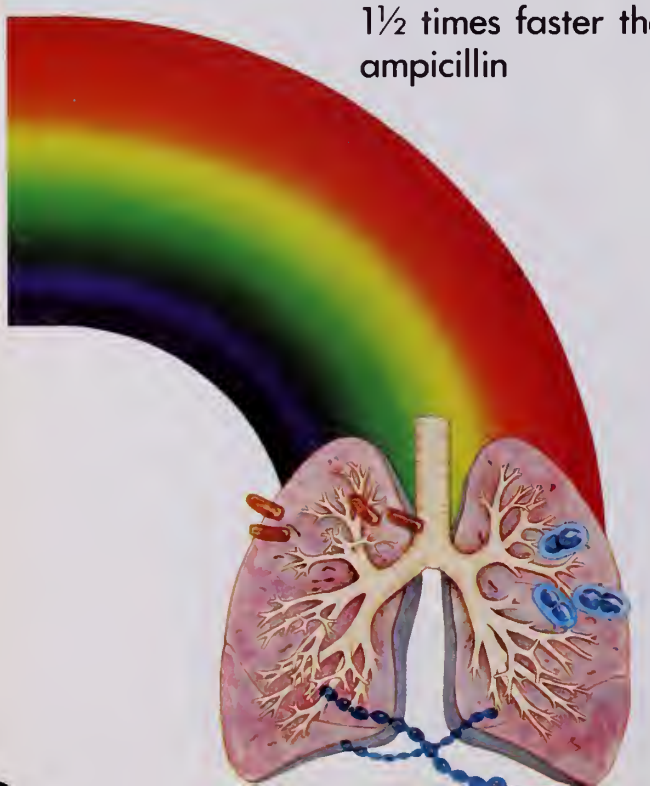



| High cure rate with CYCLAPEN® | | |
|---|---|---|
| Causative Organism | Bronchitis/Pneumonia† | No. c Patier |
| *S. pneumoniae* | 100 | 73 |
| | 95 | |
| Chronic Bronchitis† (acute exacerbation) | | |
| *H. influenzae* | 92 | 12 |
| | Though clinical improvement has been shown, bacteriologic cures cannot be expected in all patients with chronic respiratory disease due to *H. influenzae* | |
| Streptococcal Sore Throat† | | |
| Group A beta-hemolytic Streptococcus | 100 | 44 |
| | 86 | |
| | % Clinical Response | |
| | % Bacterial Eradication | |



## more than just spectru
## in bronchitis, pneumon
## and upper respiratory
## tract infections†

*Includes all patients treated. 2,415 evaluated for safety; 1,819 evaluated for efficacy.

†Due to susceptible organisms.

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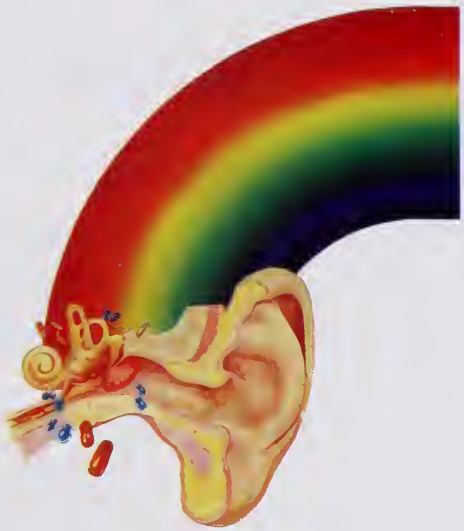
# effects than double-blind patients*



ver side effects with CYCLAPEN® in uble-blind studies to date[1,2]

| Total number of drug-related side effects in all patients | |
|---|---|
| CYCLAPEN® | 128 of 1,286 (10%) of patients |
| ampicillin | 202 of 1,129 (18%) of patients |
| Difference statistically significant (P <0.001) | |

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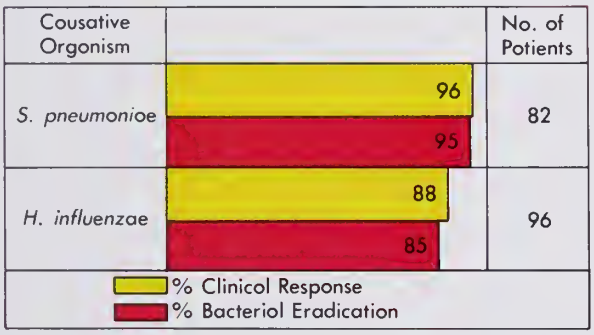
- Excellent clinical results in bronchitis, pneumonia and upper respiratory tract infections
- Significantly lower incidence of diarrhea and skin rash

old JA, Hegarty CP, Deitch MW, Walker BR: auble-blind clinical triols of oral cyclacillin nd ampicillin, *Antimicrob Ag Chemother* 5:55-58, (Jan.) 1979.
ata on file, Wyeth Laborataries.

## more than just spectrum in otitis media

Clinical efficacy of CYCLAPEN® in atitis media†




# more than just spectrum CYCLAPEN® (cyclacillin) Tablets/ Suspension

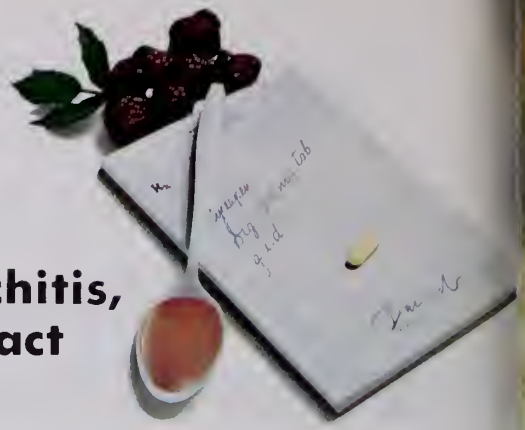
eth Laboratories
Philadelphia, Pa 19101

S important information on next page)

New from Wyeth Laboratories

# CYCLAPEN®

## (cyclacillin) Tablets/ Suspension



## more than just spectrum in bronchitis, pneumonia, upper respiratory tract infections and otitis media*

- Rapid, virtually complete absorption from GI tract
- Rapid onset of action—mean peak serum levels within 30 minutes
- Exceptionally high peak blood levels—3 times greater than ampicillin (clinical efficacy may not always correlate with blood levels)
- Rapidly excreted unchanged in the urine—1½ times faster than ampicillin
- Significantly fewer episodes of diarrhea and skin rash than reported with ampicillin in studies to date
- Excellent clinical response and outstanding bacterial eradication documented in double-blind studies involving 2,581 patients
- New CYCLAPEN® Suspension—great-tasting raspberry punch flavor

*Due to susceptible organisms.

### How Supplied

CYCLAPEN® (cyclacillin) tablets:
250 mg scored tablets
500 mg scored tablets

CYCLAPEN® (cyclacillin) for oral suspension
125 mg per 5 ml:
100 ml and 200 ml bottles
250 mg per 5 ml:
100 ml and 200 ml bottles

**Indications**

*Cyclapen® (cyclacillin) has less in vitro activity than other drugs in the ampicillin class of antibiotics and its use should be confined to the indications listed below*

Cyclapen® is indicated for the treatment of the following infections

RESPIRATORY TRACT

Tonsillitis and pharyngitis caused by Group A beta-hemolytic streptococci

Bronchitis and pneumonia caused by *S. pneumoniae* (formerly *D. pneumoniae*)

Otitis Media caused by *S. pneumoniae* (formerly *D. pneumoniae*) and *H. influenzae*

Acute exacerbation of chronic bronchitis caused by *H. influenzae**

*Though clinical improvement has been shown, bacteriologic cures cannot be expected in all patients with chronic respiratory disease due to *H. influenzae*

SKIN AND SKIN STRUCTURES (integumentary) infections caused by Group A beta-hemolytic streptococci and staphylococci, non-penicillinase producers

URINARY TRACT INFECTIONS caused by *E. coli* and *P. mirabilis*. (This drug should not be used in any infections caused by *E. coli* and *P. mirabilis* other than urinary tract infections.)

NOTE: Cultures and susceptibility tests should be performed initially and during treatment to monitor the effectiveness of therapy and the susceptibility of bacteria. Therapy may be instituted prior to the results of sensitivity testing.

**Contraindications**

The use of this drug is contraindicated in individuals with a history of an allergic reaction to penicillins.

**Warnings**

CYCLACILLIN SHOULD ONLY BE PRESCRIBED FOR THE INDICATIONS LISTED IN THIS INSERT.

CYCLACILLIN HAS LESS *IN VITRO* ACTIVITY THAN OTHER DRUGS OF THE AMPICILLIN CLASS ANTIBIOTICS. HOWEVER, CLINICAL TRIALS HAVE DEMONSTRATED THAT IT IS EFFICACIOUS FOR THE RECOMMENDED INDICATIONS.

SERIOUS AND OCCASIONAL FATAL HYPERSENSITIVITY (ANAPHYLACTOID) REACTIONS HAVE BEEN REPORTED IN PATIENTS RECEIVING PENICILLIN. ALTHOUGH ANAPHYLAXIS IS MORE FREQUENT FOLLOWING PARENTERAL ADMINISTRATION, IT HAS OCCURRED IN PATIENTS ON ORAL PENICILLINS. THESE REACTIONS ARE MORE APT TO OCCUR IN INDIVIDUALS WITH A HISTORY OF SENSITIVITY TO MULTIPLE ALLERGENS. THERE ARE REPORTS OF PATIENTS WITH A HISTORY OF PENICILLIN HYPERSENSITIVITY REACTIONS WHO EXPERIENCED SEVERE HYPERSENSITIVITY REACTIONS WHEN TREATED WITH A CEPHALOSPORIN. BEFORE THERAPY WITH A PENICILLIN, CAREFUL INQUIRY SHOULD BE MADE ABOUT PREVIOUS HYPERSENSITIVITY REACTIONS TO PENICILLINS, CEPHALOSPORINS, AND OTHER ALLERGENS. IF AN ALLERGIC REACTION OCCURS, THE DRUG SHOULD BE DISCONTINUED AND APPROPRIATE THERAPY SHOULD BE INITIATED. SERIOUS ANAPHYLACTOID REACTIONS REQUIRE IMMEDIATE EMERGENCY TREATMENT WITH EPINEPHRINE, OXYGEN, INTRAVENOUS STEROIDS, AIRWAY MANAGEMENT, INCLUDING INTUBATION, SHOULD ALSO BE ADMINISTERED AS INDICATED.

**Precautions**

Prolonged use of antibiotics may promote the overgrowth of nonsusceptible organisms. If superinfection occurs during therapy, appropriate measures should be taken.

PREGNANCY. Pregnancy Category B. Reproduction studies have been performed in mice and rats at doses up to ten times the human dose and have revealed no evidence of impaired fertility or harm to the fetus due to cyclacillin. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

NURSING MOTHERS. It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when cyclacillin is administered to a nursing woman.

**Adverse Reactions**

The oral administration of cyclacillin is generally well tolerated.

As with other penicillins, untoward reactions of the sensitivity phenomena are likely to occur, particularly in individuals who have previously demonstrated hypersensitivity to penicillins or in those with a history of allergy, asthma, fever, or urticaria.

The following adverse reactions have been reported with the use of cyclacillin: diarrhea (in approximately 1 out of 20 patients treated), nausea and vomiting (in approximately 1 in 50), and skin rash (in approximately 1 in 60). Isolated instances of headache, dizziness, abdominal pain, vaginitis, and urticaria have been reported. (See WARNINGS)

Other less frequent adverse reactions which may occur and that have been reported during therapy with other penicillins are: anemia, thrombocytopenia, thrombocytopenic purpura, leukopenia, neutropenia and eosinophilia. These reactions are usually reversible on discontinuation of therapy.

As with other semisynthetic penicillins, SGOT elevations have been reported.

**Dosage and Administration**

| INFECTION* | ADULTS | CHILDREN |
|---|---|---|
| | | Dosage should not exceed in a dose higher than that for adults. |
| *Respiratory Tract* | | |
| Tonsillitis & Pharyngitis** | 250 mg q.i.d. in equally spaced doses | body weight <20 kg (<44 lbs) 125 mg q.i.d. in equally spaced doses; body weight >20 kg (>44 lbs) 250 mg q.i.d. in equally spaced doses |
| Bronchitis and Pneumonia | | |
| Mild or Moderate Infections | 250 mg q.i.d. in equally spaced doses | 50 mg/kg/day q.i.d. in equally spaced doses |
| Chronic Infections | 500 mg q.i.d. in equally spaced doses | 100 mg/kg/day q.i.d. in equally spaced doses |
| *Otitis Media* | 250 mg to 500 mg q.i.d. in equally spaced doses depending on severity | 50 to 100 mg/kg/day in equally spaced doses depending on severity |
| *Skin & Skin Structures* | 250 mg to 500 mg q.i.d. in equally spaced doses depending on severity | 50 to 100 mg/kg/day in equally spaced doses depending on severity |
| *Urinary Tract* | 500 mg q.i.d. in equally spaced doses | 100 mg/kg/day in equally spaced doses |

*As with antibiotic therapy generally, treatment should be continued for a minimum of 48 to 72 hours after the patient becomes asymptomatic or when evidence of bacterial eradication has been obtained.

**In infections caused by Group A beta-hemolytic streptococci, a minimum of 10 days of treatment is recommended to guard against the risk of rheumatic fever or glomerulonephritis.

In the treatment of chronic urinary tract infection, frequent bacteriologic and clinical appraisal is necessary during therapy and may be required for several months afterwards.

Persistent infection may require treatment for several weeks.

Cyclacillin is not indicated in children under 2 months of age.

*Patients with Renal Failure*

Based on a dosage of 500 mg q.i.d., the following adjustment in dosage interval is recommended:

Patients with a creatinine clearance of >50 ml/min need no dosage interval adjustment.

Patients with a creatinine clearance of 30-50 ml/min should receive doses every 12 hours.

Patients with a creatinine clearance of between 15-30 ml/min should receive full doses every 18 hours.

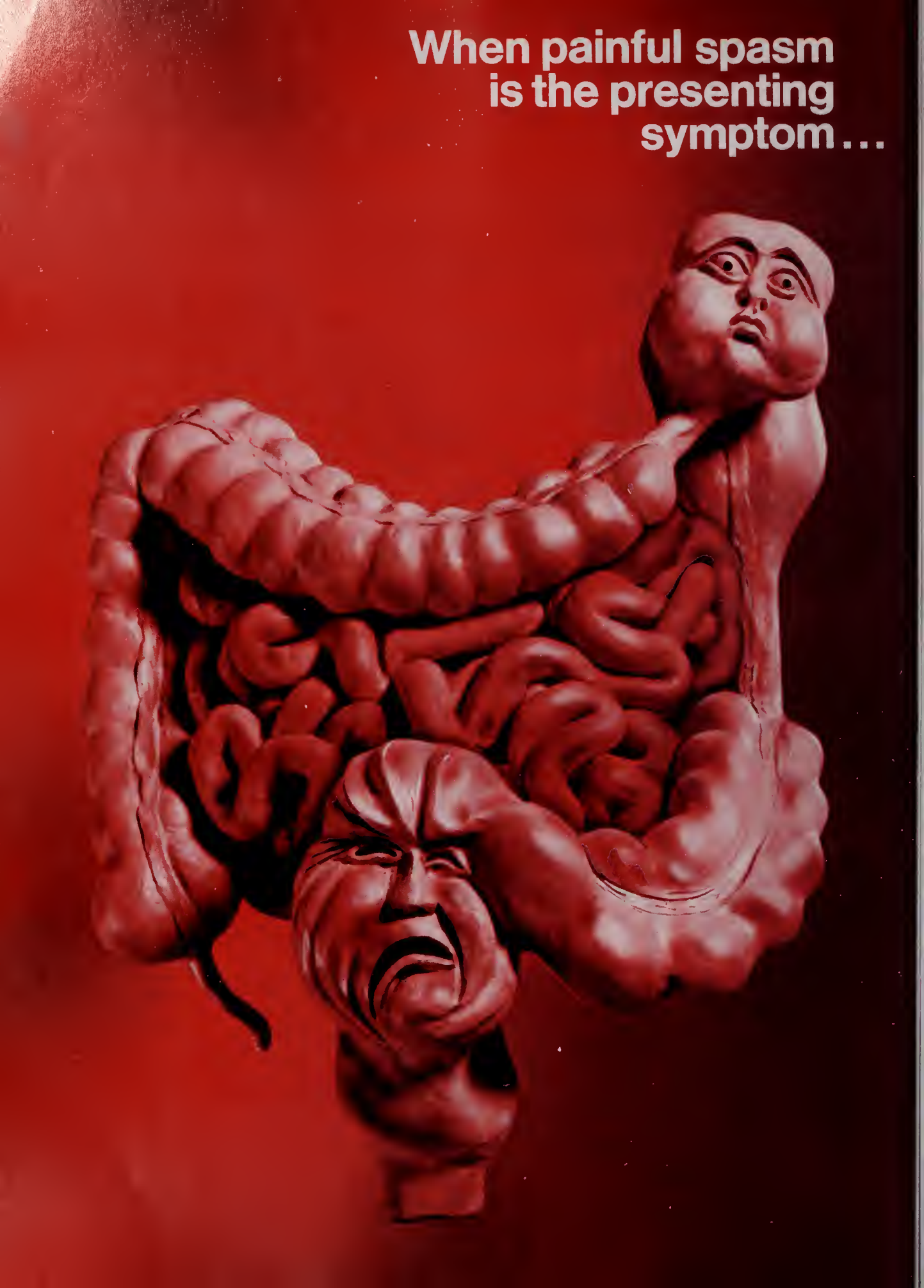
Patients with a creatinine clearance of between 10-15 ml/min should receive full doses every 24 hours.

In patients with a creatinine clearance of < 10 ml/min or serum creatinine values of > 10 mg%, serum cyclacillin levels are recommended to determine both subsequent dosage and frequency.

**Wyeth Laboratories**
Philadelphia, Pa 19101

Tagamet®
brand of
cimetidine
How Supplied:
Pale green 300 mg. tablets
in bottles of 100 and Single Unit Packages of 100
(intended for institutional use only).
Injection, 300 mg./2 ml.,
in single-dose vials
and in 8 ml. multiple-dose vials,
both in packages of 10.
SK&F LAB CO.
a SmithKline company
2ml.=300mg.
Tagamet
(cimetidine HCl
300mg.
cimetidine/2ml.
Tagamet HCl
brand of
cimetidine
hydrochloride
SK&F LAB CO.
Tagamet
brand of cimetidine
Tablets
100 tablets
NDC 0108-5013-20
SK&F LAB CO., Caroline, P.R. 00630
Subsidiary of SmithKline Corporation
SKF
T13

When painful spasm is the presenting symptom...



..in the functional bowel/irritable bowel syndrome*

# Bentyl®

## (dicyclomine hydrochloride USP)

10 mg. capsules, 20 mg. tablets,
10 mg./5 ml. syrup, 10 mg./ml. injection

helps control abnormal motor activity
with minimal anticholinergic side effects†

Demonstrated smooth muscle relaxant activity.

In this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

. . . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.

Pylorospasm has almost totally blocked passage of barium meal.

Barium meal beginning to pass 10 minutes after intramuscular injection of 20 mg. Bentyl.

*"The correlation of spasm relief and drug given was excellent."*

*This drug has been classified "probably" effective in treating functional bowel/irritable bowel syndrome.

†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:
King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

**Merrell**

8-4420 (Y736A) MNR-804

# Bentyl®

## (dicyclomine hydrochloride USP)

Capsules, Tablets, Syrup, Injection

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATIONS
Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the following indications as "probably" effective
For the treatment of functional bowel/irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.
THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.
For use in the treatment of infant colic (syrup).
Final classification of the less-than-effective indications requires further investigation.

CONTRAINDICATIONS: Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient; unstable cardiovascular status in acute hemorrhage; severe ulcerative colitis; toxic megacolon complicating ulcerative colitis; myasthenia gravis. WARNINGS: In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. PRECAUTIONS: Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with: Autonomic neuropathy. Hepatic or renal disease. Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon. Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.
Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. ADVERSE REACTIONS: Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention; blurred vision and tachycardia; palpitations; mydriasis; cycloplegia; increased ocular tension; loss of taste; headache; nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation, bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. DOSAGE AND ADMINISTRATION: Dosage must be adjusted to individual patient's needs.
*Usual Dosage*: Bentyl 10 mg. capsule and syrup: *Adults*: 1 or 2 capsules or teaspoonfuls syrup three or four times daily. *Children*: 1 capsule or teaspoonful syrup three or four times daily. *Infants*: ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg.: *Adults*: 1 tablet three or four times daily. Bentyl Injection: *Adults*: 2 ml. (20 mg.) every four to six hours intramuscularly only. NOT FOR INTRAVENOUS USE. MANAGEMENT OF OVERDOSE: The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine* (bethanecol chloride USP) should be used.
Product information as of October, 1978.

Injectable dosage forms manufactured by CONNAUGHT LABORATORIES, INC., Swiftwater, Pennsylvania 18370 or TAYLOR PHARMACAL COMPANY, Decatur, Illinois 62525 for MERRELL-NATIONAL LABORATORIES, Division of Richardson-Merrell Inc., Cincinnati, Ohio 45215, U.S.A.

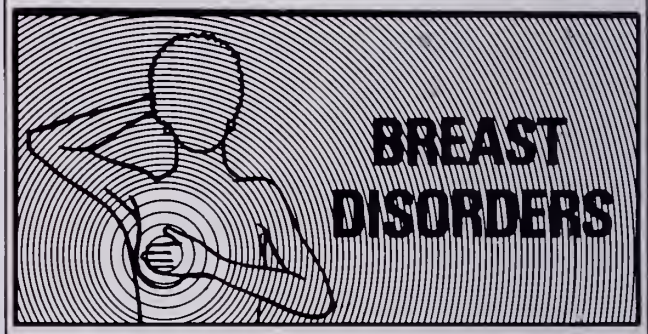
**Merrell**

MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc
Cincinnati, Ohio 45215, U.S.A.


# MEDICAL MESSAGE
## from the Florida Doctors

THE FLORIDA MEDICAL ASSOCIATION, INC. 1894

It is not at all uncommon for a woman to feel panic when she discovers a lump or an abnormality in her breast. The panic can be greatly reduced or eliminated through a visit to her doctor.




Florida physicians have been encouraging their female patients to practice breast self-examination on a monthly basis. As a result of this effort many women have discovered abnormalities that might have gone unnoticed until their next physical examination.

While physicians are quick to point out that only one in 10 lumps are found to be malignant, they stress the importance of reporting any abnormality as soon as it is discovered. Most disorders require no treatment, or treatment which can be rendered in the doctor's office. Only your physician is trained to detect which lumps or abnormalities may need further attention, and time is of great importance.

If the lump or abnormality turns out to be malignant, early detection is essential. It is estimated that 70.2 percent of women with cancerous lumps are completely symptom free after 10 years when the lump is discovered early. That percentage jumps to 97.1 when the disorder has been detected by mammography before the lump ever formed.

Physicians advise that 93 percent of all women never get a breast cancer, but that early detection is important in the treatment of all disorders. Breast self-examination is important for all women. If you have had a breast cancer or if women in your family have had breast cancer, your physician may want to examine you on a more frequent schedule. If you have no family history of cancer, you can help preserve your health through self-examination and regular visits to your physician.

*This is a medical message from the Florida Medical Association of the doctors of Florida and as a public service feature of this newspaper.*

# MEETINGS

## Approved by the FMA Committee on Continuing Medical Education

### DECEMBER

**El Curso Interamericano: Temas Clinicos En Oftalmologia (In Spanish),** Dec. 3-7, Hotel Intercontinental, Miami.*

**Recent Advances in Treatment of Sleep Disorders,** Dec. 5, Mt. Sinai Medical Center, Miami Beach. For information: CME Coordinator, Mt. Sinai Medical Center, 4300 Alton Rd., Miami Beach 33140.

**Critical Care Gastroenterology,** Dec. 5-7, Contemporary Resort Hotel, Walt Disney World, Lake Buena Vista. For information: Postgraduate Courses Department, American College of Physicians, 4200 Pine Street, Philadelphia, PA 19104.

**Diabetes Update — 1979,** December 6, Curtis Hixon Convention Hall, Tampa. For information: R. V. Farese, M.D., University of South Florida, College of Medicine, Tampa 33612.

**Family Practice Seminar,** Dec. 6-8, South Seas Plantation, Captiva.*

**Neuro-Ophthalmology,** Dec. 6-8, Key Biscayne Hotel, Key Biscayne.*

**Pulmonary Function Studies,** Dec. 8, Holy Cross Hospital, Fort Lauderdale. For information: Jon R. Fichtelman, M.D., P.O. Box 23460, Fort Lauderdale 33307.

**Training Institute on Addictions,** Dec. 9-14, Deauville Hotel, Miami Beach. For information: The U.S. Journal of Drug and Alcohol Dependence, Inc., 2119-A Hollywood Blvd., Hollywood 33020.

**Fetal Monitoring,** Dec. 10-11, Sheraton Sand Key, Clearwater. For information: Jeanette T. Abich, R.N., Morton F. Plant Hospital, Box 210, Clearwater 33517.

**Hypertension,** Dec. 11, Manatee Memorial Hospital Auditorium, Bradenton. For information: Leonides Y. Teves, M.D., 706 39th St., W., Bradenton 33505.

**Ob-Gyn Ultrasound Seminar,** Dec. 12-16, Royal Beach Hotel & Racquet Club, Key Biscayne.*

**Laparoscopy Course,** Dec. 17-18, University Hospital of Jacksonville.

For information: Robert J. Thompson, M.D., 655 West 8th Street, Jacksonville 32209.

### JANUARY

**The Psychotherapy of Schizophrenia and Severe Depression,** Jan. 2-4, Holiday Inn Surfside, Daytona Beach. For information: Beatrice Silverman, M.D., 1220 Willis Avenue, Daytona Beach 32014.

**Mid-Winter Cruise on Intensive Care,** Jan. 5-15, Aboard the "S/S DORIC".*

**17th Annual Postgraduate Seminar in Anesthesiology,** Jan. 10-13, Americana Hotel, Miami Beach. For information: Dept. of Anesthesiology, Mt. Sinai Medical Center, 1200 N.W. 10th Ave., Miami 33136.

**Law and the Emergency Department,** Jan. 11, Miami. For information: Emergency Medical Services Symposium, 3900 N.W. 79th Ave., Suite 469, Miami 33166.

**25th Annual Cardiovascular Seminar,** Jan. 11-12, Holiday Inn, Longboat Key. For information: E. Jerry Eatman, P.O. Box 12407, St. Petersburg 33733.

**Trinidad/Tobago Seminar,** Jan. 13-20, Trinidad, West Indies. For information: Dept. of Anesthesiology, Mt. Sinai Medical Center, 1200 N.W. 10th Ave., Miami 33136.

**Second Annual Walt Disney World Pulmonary Wintercourse,** Jan. 14-17, Contemporary Resort Hotel, Lake Buena Vista. For information: Asher Marks, M.D., Chairman, Pulmonary Wintercourse Planning Committee, c/o Florida Lung Association, Box 8127, Jacksonville 32211.

**Oral Pathology Review,** Jan. 16-18, University of Miami School of Medicine, Miami.*

**Art and Science in the Therapy of Difficult Problems in Surgery,** Jan. 16-19, Americana Hotel, Bal Harbour.*

**Continuing Education in Pediatrics — 1980,** Jan. 20-24, Diplomat Resorts, Hollywood Beach. For information: Donald H. Altman, M.D., 6125 S.W. 31st St., Miami 33155.

**Gynecologic Surgery Symposium,** Jan. 20-25, Royal Biscayne Beach Hotel & Racquet Club, Key Biscayne.*

**Echocardiography In-Service Workshops,** Jan. 21-25, University of Miami, Jackson Memorial Medical Center, Miami.*

**Current Concepts in Intensive Care for Neurological Trauma and Disease: A New Decade,** Jan 24-27, Americana Hotel, Bal Harbour.*

**Coronary Disease, Exercise Testing and Cardiac Rehabilitation,** Jan.25-27, Konover Hotel, Miami. For information: International Medical Education Corp., Div. of Postgraduate Education, Dept. 12, 64 Inverness Dr. E., Englewood, CA 80112.

**Far East Orient Seminar in Anesthesiology,**Jan. 26-Feb. 10, Philippines/Hong Kong/Thailand — Honolulu (optional). For information: Dept. of Anesthesiology, Mt. Sinai Medical Center, 1200 N.W. 10th Ave., Miami 33136.

**Pediatric Nephrology VII,** Jan. 27-30, Americana Hotel, Bal Harbour.*

**Family Practice Clinical Conference,** Jan. 27-Feb. 1, Lake Buena Vista. For information: Orris Rollie, M.D., Florida Hospital, Orlando.

**A Neurological Update,** Jan. 28-Feb. 1, Americana Hotel, Bal Harbour.*

**5th Annual Review and Recent Practical Advances in Pathology,** Jan. 28-Feb. 1, Americana Hotel, Bal Harbour.*

FEBRUARY

**4th Annual Cardiovascular Symposium—Cardiovascular Pharmacology and Therapeutics,** Feb. 1-2, Sheraton Sand Key, Clearwater Beach. For information: Donald R. Eubanks, M.D., 323 Jeffords St., Clearwater 33517.

**Cardiology at the Dark Continent,** Feb. 1-2, Busch Gardens, Tampa. +

**Florida Society of Pathologists Annual Slide Seminar (Diagnostic Problems in Soft Tissue Tumors and GYN Pathology) plus a Seminar in Cardiovascular Pathology,** Feb. 2-3, Konover Hotel, Miami Beach. For information: Morton Robinson, M.D., Mt. Sinai Hospital, 4300 Alton Rd., Miami Beach 33140.

**"Imageology 1980" 18th Annual Seminar,** Feb. 2-8, Fontainebleau Hilton, Miami Beach. For information: Lucy R. Kelley, c/o Miami Seminars, Box 343762, Coral Gables 33134.

**12th Annual Postgraduate Seminar in Adult & Pediatric Urology,** Feb. 6-9, Hotel Intercontinental, Miami. For information: Victor Politano, M.D., 6614 Miami Lakes Dr., East Miami Lakes 33014.

**National Burn Seminar,** Feb. 8-9, Gainesville Hilton, Gainesville.**

**Decision-Tree Approach to Diagnostic Radiology,** Feb. 8-11, Dutch Inn, Lake Buena Vista. For information: Lucy R. Kelley, c/o Miami Seminars, Box 343762, Coral Gables 33134.

**Gynecologic Oncology Seminar,** Feb. 10-15, Royal Biscayne Beach Hotel & Racquet Club, Key Biscayne.*

**Brief Therapy of Stress Response Syndromes,** Feb. 14, Holiday Inn, Plantation. For information: Peggy Jackson, ACSW, 330 S.W. 27th Ave., Ft. Lauderdale 33312.

**Glaucoma,** Feb. 14-16, Holiday Inn, Civic Center, Miami.*

**1st Annual Family Practice Update,** Feb. 18-22, Daytona Beach. For information: Ken Mead, Post Office Box 1990, Daytona Beach 32015.

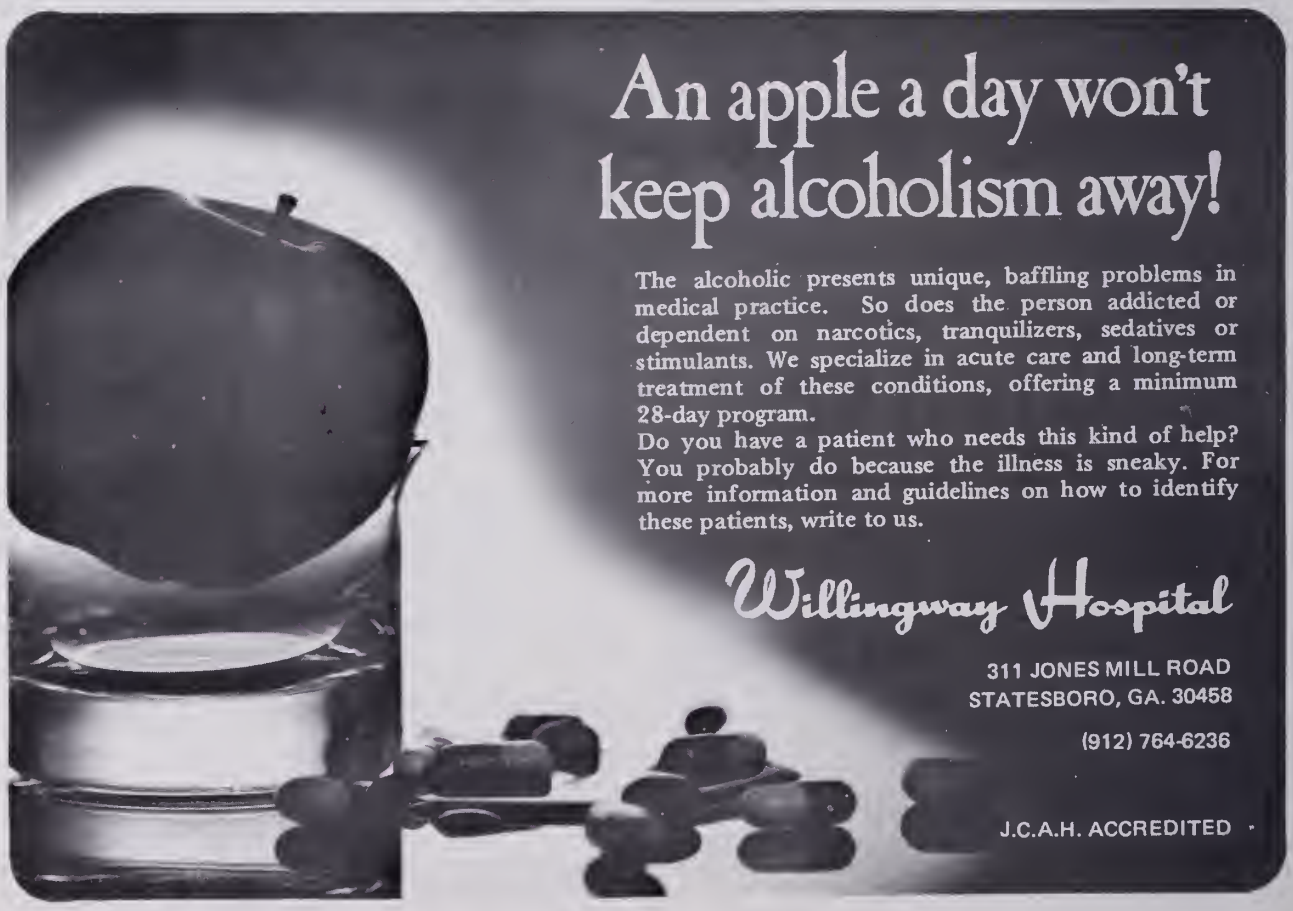
**Nuclear Cardiology In-Service Workshop,** Feb. 18-22, University of Miami, Jackson Memorial Medical Center, Miami.*

**Florida Midwinter Seminar in Ophthalmology & Otolaryngology,** Feb. 24-Mar. 1, Bahia Mar Hotel, Ft. Lauderdale.*

**12th Teaching Conference in Clinical Cardiology,** Feb. 27-Mar. 1, Americana Hotel, Bal Harbour.*

**7th Annual Selected Topics in Urology,** Feb. 28-Mar. 1, Gainesville Hilton, Gainesville.**

**Pediatric Dermatology Seminar,** Feb. 28-Mar. 2, Eden Roc Hotel, Miami Beach. For information: Guinter Kahn, M.D., 16800 N.W. 2nd Ave., Suite 401, North Miami Beach 33169.

# CLASSIFIED ADS

**Physicians Wanted**

FAMILY PRACTITIONER OR INTERNIST wanted to share facilities with three practitioners in solo practice. Major equipment provided. Rent $250 per month. Competent laboratory and x-ray departments with income based on use. Bookkeeping system and receptionist shared. Contact: T. C. Kenaston Jr., M.D., P.O. Box 550, Cocoa, Florida 32922.

CENTRAL FLORIDA multispecialty group has opening for fourth general practitioner. Excellent financial opportunity; new well equipped office near three hospitals. Write C-945, P.O. Box 2411, Jacksonville, Florida 32203.

INTERNIST OR FAMILY PRACTITIONER for private, non-profit multispecialty facility. Must be Board Certified or Board Eligible. Must be able to achieve hospital privileges. Excellent compensation package. No overhead. Contact: Byron S. Arbeit, Executive Director, Mid-County Medical Center, 8190 Okeechobee Boulevard, West Palm Beach, Florida 33411, or call (305) 684-1119.

WANTED: FAMILY PRACTITIONERS AND GENERAL PRACTITIONERS! Large private out-patient medical facility in Orlando, Florida is seeking Board Eligible or Board Certified physicians for Family Practice. No evenings and weekends. Negotiable terms. Send C.V. or call Mr. Paul Switzer at (305) 645-5017, or 5300 Diplomat Circle, Orlando, Florida 32810.

IMMEDIATE OPENING: Internist willing to do Family Practice or General Practitioner to associate with busy general surgeon with two separate offices (complete with X rays) in a booming Northeast Florida city. Busy industrial practice. Flexible arrangements. Write C-950, Post Office Box 2411, Jacksonville, Florida 32203.

PRIMARY CARE CLINIC M.D.'s wanted. Good Salary-40 hours per week. Significant fringe benefits, including liability insurance. Must have Florida license. Forward Curriculum Vitae to P.O. Box 11843, Tampa, Florida 33680.

MULTISPECIALTY GROUP OF PHYSICIANS located in North Florida seeking to expand in the following specialties: Rheumatology, Gastroenterology, Hematology/Oncology, Endocrinology, and Infectious Diseases. Please send curriculum vitae to: C-928, P.O. Box 2411, Jacksonville, Florida 32203.

ORTHOPEDIST—Excellent opportunity for the right man in twenty physician multispecialty group in beautiful Northwest Florida beach community. Immediate incentive compensation plan with guarantee leading to full partnership. No investment required. Ideal practice setting in new building located directly across the street from new modern hospital. Contact: Theodore D. Rahe, Administrator, White-Wilson Medical Center, Fort Walton Beach, Florida 32548. (904) 863-4121.

CARDIOLOGIST NEEDED: Established cardiologist in multispecialty group needs aggressive Board Certified or Board Eligible associate to join large practice in Coral Springs, one of the fastest growing communities in Florida. Please send CV to Coral Springs Medical Group, 9441 West Sample Road, Coral Springs, Florida 33065.

OB/GYN UNIQUE OPPORTUNITY. Need associate in well established, high quality, rapidly growing private practice in New Port Richey, Florida. New, fully equipped office, near three hospitals, walking distance to beach area and shopping centers. Terms negotiable. Contact G.G. Coquelet, M.D., 844 Gardens Drive, New Port Richey, Florida 33552.

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THE FLORIDA GROUP INTERNATIONAL DOCTORS IN ALCOHOLICS ANONYMOUS will meet on October 27 and December 29. Further details are available from the Secretary, 2111 South Osprey, Sarasota, Florida, or by phone, (813) 366-6133.

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**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms:** *Escherichia coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris, Proteus morganii.* **It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination.** *Note:* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

**Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.**

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**Contraindications:** Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers; infants less than two months of age.

**Warnings:** Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

**Precautions:** Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

**Adverse Reactions:** All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

**Dosage: Not recommended for infants less than two months of age.**

*Urinary Tract Infections:* Usual adult dosage—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

Recommended dosage for children—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. A guide follows:

*Children two months of age or older:*

| Weight | | Dose—every 12 hours | |
|---|---|---|---|
| lbs | kgs | Teaspoonfuls | Tablets |
| 20 | 9 | 1 teasp. (5 ml) | ½ tablet |
| 40 | 18 | 2 teasp. (10 ml) | 1 tablet |
| 60 | 27 | 3 teasp. (15 ml) | 1½ tablets |
| 80 | 36 | 4 teasp. (20 ml) | 2 tablets or 1 DS tablet |

For patients with renal impairment:

| Creatinine Clearance (ml/min) | Recommended Dosage Regimen |
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| Above 30 | Usual standard regimen |
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*Pneumocystis carinii pneumonitis:* Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

**Supplied:** *Double Strength (DS) tablets,* each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. *Tablets,* each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10. *Oral suspension,* containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole, fruit-licorice flavored—bottles of 16 oz (1 pint).

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DECEMBER 1979 • VOL 66 • NO. 12

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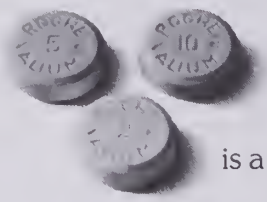
# A character all its own.




Valium (diazepam/Roche) is a benzodiazepine with a character all its own. Pharmacologically, it is a potent skeletal muscle relaxant and anticonvulsant (in adjunctive use), as well as an antianxiety agent. Pharmacokinetically, only Valium provides active *diazepam* as well as the active metabolites 3-hydroxydiazepam, desmethyldiazepam and oxazepam.

But the individual character of Valium is even more apparent clinically than pharmacokinetically. And far more significant. That's because of the patient response obtained with Valium. A response which brings a calmer frame of mind. A response which has a pronounced effect on the somatic symptoms of anxiety, particularly muscular tension. A response which helps the patient feel more like himself again because of the way Valium reduces the overwhelming symptoms of anxiety and psychic tension.

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2-mg, 5-mg, 10-mg scored tablets

**a prudent choice in psychic tension and anxiety**

**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications:** Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

**Contraindicated:** Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

**Warnings:** Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

***Usage in Pregnancy:*** **Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

**Precautions:** If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

**Side Effects:** Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

**Dosage:** Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

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## On the cover

The holiday theme "to welcome a new decade—1980" was drawn by the Editor's best friend—the fifth holiday theme by the same artist.

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Effectiveness in long-term use, i.e., more than 4 months, has not been assessed by syste atic clinical studies. Reassess periodically usefulness of the drug for the individual patient.

**Contraindications:** Known sensitivity to benzodiazepines or acute narrow-angle glaucoma

**Warnings:** Not recommended in primary depressive disorders or psychoses. As with all CN acting drugs, warn patients on lorazepam not to operate machinery or motor vehicles, and diminished tolerance for alcohol and other CNS depressants.

Physical and Psychological Dependence. Withdrawal symptoms like those noted with bar turates and alcohol have occurred following abrupt discontinuance of benzodiazepin (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Add tion-prone individuals, e.g. drug addicts and alcoholics, should be under careful surveillan when on benzodiazepines because of their predisposition to habituation and dependen Withdrawal symptoms have also been reported following abrupt discontinuance of benzo azepines taken continuously at therapeutic levels for several months.

**Precautions:** In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid ov sedation

Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may result symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occ sional convulsions

Observe usual precautions with impaired renal or hepatic function.

Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazep has not been shown of significant benefit in treating gastrointestinal or cardiovascular com nent

Esophageal dilation occurred in rats treated with lorazepam for more than 1 year 6mg/kg/day. No effect dose was 1.25mg/kg/day (approximately 6 times the maximum hum therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn wit 2 months of first observation. Clinical significance is unknown; but use of lorazepam for p longed periods and in geriatric patients requires caution and frequent monitoring for sympto of upper G.I. disease

Safety and effectiveness in children under 12 years have not been established.

ESSENTIAL LABORATORY TESTS: Some patients have developed leukopenia; some have h elevations of LDH. As with other benzodiazepines, periodic blood counts and liver function te are recommended during long-term therapy

CLINICALLY SIGNIFICANT DRUG INTERACTIONS: Benzodiazepines produce CNS depress effects when administered with such medications as barbiturates or alcohol.

CARCINOGENESIS AND MUTAGENESIS: No evidence of carcinogenic potential emerged rats during an 18-month study. No studies regarding mutagenesis have been performed.

PREGNANCY. Reproductive studies were performed in mice, rats, and 2 strains of rabb Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschi malformed skull and microphthalmia) were seen in drug-treated rabbits without relationsh dosage. Although all these anomalies were not present in the concurrent control group, t have been reported to occur randomly in historical controls. At 40mg/kg and higher, there evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lo doses. Clinical significance of these findings is not known. However, increased risk of conge tal malformations associated with use of minor tranquilizers (chlordiazepoxide, diazepam meprobamate) during first trimester of pregnancy has been suggested in several stud Because use of these drugs is rarely a matter of urgency, use of lorazepam during this per should almost always be avoided. Possibility that a woman of child-bearing potential may pregnant at institution of therapy should be considered. Advise patients if they become pr nant to communicate with their physician about desirability of discontinuing the drug

In humans, blood levels from umbilical cord blood indicate placental transfer of lorazep and its glucuronide

NURSING MOTHERS. It is not known if oral lorazepam is excreted in human milk like ot benzodiazepines. As a general rule, nursing should not be undertaken while on a drug si many drugs are excreted in milk

**Adverse Reactions,** if they occur, are usually observed at beginning of therapy and gener disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxi patients, most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9 weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, n sea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, e function disturbance, various gastrointestinal symptoms and autonomic manifestations. In dence of sedation and unsteadiness increased with age. Small decreases in blood pressu have been noted but are not clinically significant, probably being related to relief of anxiety

**Overdosage:** In management of overdosage with any drug, bear in mind that multiple age may have been taken. Manifestations of overdosage include somnolence, confusion and co Induce vomiting and/or undertake gastric lavage followed by general supportive care, monit ing of vital signs and close observation. Hypotension, though unlikely, usually may be control with Levarterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined

**Ativan® IV for (lorazepam) Anxiety**

***Dosage:*** **Individualize for maximum beneficial effects. Increase do gradually when needed, giving higher evening dose before increasi daytime doses. Anxiety, usually 2-3mg/day given b.i.d. or t.i.d.; dosa may vary from 1 to 10mg/day in divided doses. For elderly or debi tated, initially 1-2mg/day; insomnia due to anxiety or transient situ tional stress, 2-4mg h.s.**

***How Supplied:*** **0.5, 1.0 and 2.0mg tablets.**

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# Why one benzodiazepine and not another?

Are you concerned about long-acting metabolites? Many clinicians, as well as pharmacologists, are beginning to draw attention to this problem (see New England Journal of Medicine, April 5, 1979).

In contrast to some older benzodiazepines, Ativan (lorazepam) does not give rise to long-lasting active metabolites. As with all benzodiazepines, you should follow the usual precautions concerning co-administration with other CNS depressants and warn your patients against operating dangerous machinery and motor vehicles.

However, it is noteworthy that Ativan showed no clinical evidence of accumulation even when given in high doses over periods up to 6 months. The half-life of free lorazepam is about 12 hours; steady-state serum levels are attained in 2-3 days. Comparable data for diazepam: 20-50 hours and at least 7-10 days. (The pharmacokinetic profile of a drug can define such characteristics as absorption, distribution, metabolism and elimination but cannot, at present, be directly related to its therapeutic effectiveness.)

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# Dean's Page

# The Past: Harbinger of the Future

**William B. Deal, M.D.**

As the traditional holiday season approaches, our thoughts turn to nostalgic events. We tend to tuck away in the distant recesses of our brain, the problems that confront us, individually and collectively.

Together, we are concerned about: (1) governmental intervention in the practice of medicine, (2) the lack of responsiveness of third parties, (3) inflation, and (4) the erosion of public confidence in our profession. Each of these topics has been the subject of editorials, essays and addresses. Whenever two or three are gathered together, at least one of these topics becomes the subject of conversation.

Do we dwell too much on the present? Could we meet the challenges ahead better by reflecting upon our past during the holiday season?

The standard of health care in this nation is at an all time high. Longevity is nearing eighty. Infant mortality has plummeted. Small pox has been relegated to the history books. Pneumonia as a cause of death is now limited almost exclusively to the chronically ill. Cardiovascular surgery and microsurgery have given literally thousands new, productive lives. Psychoactive drugs have unchained thousands of confused minds. New radiological diagnostic techniques have reduced pain and suffering. Organ transplantation has returned a quality of life to the young and old. Potentially crippling childhood diseases are now controlled effectively by mass inoculation. Rheumatic fever and scarlet fever no longer pose an ominous threat to our youth. Advances in orthopaedic surgery are legion. Significant strides have been made in the war on cancer. Access to medical care is available to nearly everyone. The list could continue.

These and other accomplishments were made by self-sacrificing physicians through long, tedious hours of service. The monumental gains of the past are harbingers of our future capabilities. Three of the four previously mentioned concerns are economic and the resolutions are not solely within our province. However, the fourth is **solely** within our power to correct.

With the dawning of a new decade we should rededicate ourselves to the quality patient-physician relationships which at times are forgotten in the pressures of day to day problems.

We are reminded of the last paragraph of the Oath of Hippocrates (a. 400 B.C.)

> "While I continue to keep this oath unviolated may it be granted to me to enjoy life and the practice of the art, respected by all men at all times but should I trespass and violate this oath, may the reverse be my lot."

Dr. Deal is Vice President for Health Affairs and Dean, University of Florida College of Medicine, Gainesville.

● Dr. Deal, University of Florida College of Medicine, Gainesville 32610.

The opinions stated on this page are those of the individual Deans and do not necessarily represent the policy of the FMA.

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They're in their late sixties, the beneficiaries of more liberal retirement laws and more enlightened attitudes toward the elderly. They're leading socially productive lives. But recently, without any clear cause, they had each begun to experience mild episodes of symptoms such as confusion, mood-depression, and dizziness. Their ability to function could have been jeopardized. That's when they became the beneficiaries of oral Hydergine therapy.

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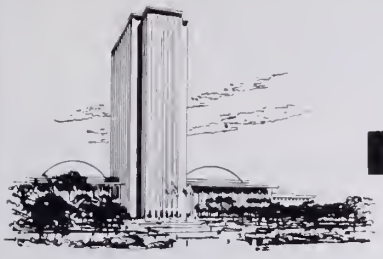

# LEGISLATIVE NEWS

The 1979 Florida Legislature enacted several bills of both direct and indirect interest to physicians of the State. The following summary of some of these new laws was prepared by the FMA Capital Office:

### Cancer Control and Research Act (SB 1024)

This law revises present statutory authority of the Department of Health and Rehabilitative Services regarding state planning for cancer control and continuing education programs.

The law provides for a 24-member Cancer Control and Research Advisory Board with broad representation of various health care specialties and cancer organizations. Among the board's responsibilities will be to advise the Secretary of the Department of HRS with respect to cancer control and research in Florida, as well as, approve the Florida Cancer Plan. Further, the board will formulate and recommend to the Secretary of the Department of HRS a plan for the care and treatment of cancer patients to include: recommendations for the establishment of standard requirements for the organization, equipment and conduct of cancer units or departments in hospitals and clinics in Florida; coordination with other plans concerning cancer control and research, and recommendations for awarding grants and contracts for programs in cancer control or prevention, cancer education and training and cancer research.

The law also establishes the Florida Cancer Control and Research Fund which is to be used exclusively for grants and contracts for approved programs and the administration of this law.

Another part of this legislation amends the Mental Health and Retardation laws to provide a mechanism to gain a valid consent for non-emergency surgical procedures to be performed on HRS clients where the department is the legal guardian or custodian of the client. A court of competent jurisdiction will hold a hearing to determine the appropriateness of a surgical procedure requested for such a client of the department.

### SB 61 (Ch. 79-198)

Senate Bill 61 requires physicians, osteopathic physicians, chiropractors and podiatrists to submit to patients, or the patient's insurer, or to an administrative agency for federal or state health programs under which the patient is receiving benefits, upon request, an itemized statement of the specific services rendered and the charge for each service no later than the physician's next regular billing cycle which follows the fifth day after the services are rendered. Prior payment for services is prohibited as a condition to receiving an itemized statement.

Additionally, this law requires hospitals and nursing homes to provide in their initial billing an itemized statement detailing, specific services received and expenses incurred for each service, as well as, enumerating in detail the components of the service received in each department and including unit-price data on rates charged by the hospital or nursing home as prescribed by the Department of Health and Rehabilitative Services. The patient, or his survivor or legal guardian, may request the same information for any subsequent billings by the hospital or nursing home.

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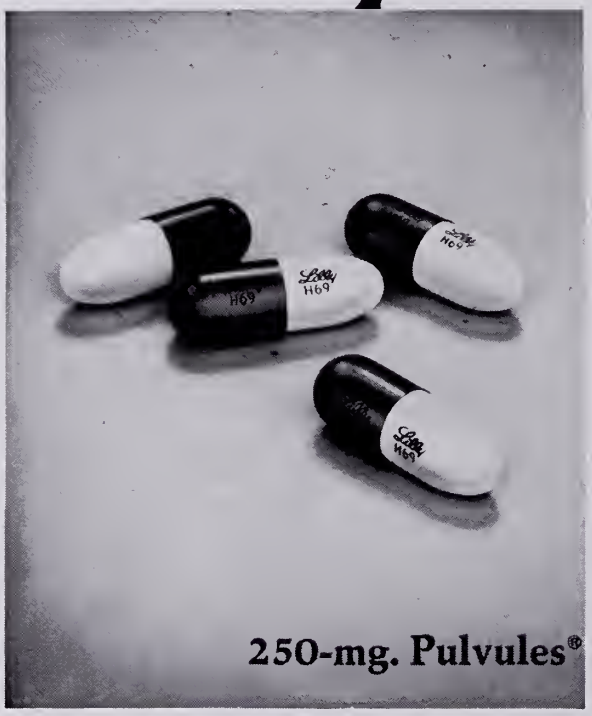
**It's always easy to see both sides of an issue we are not particularly concerned about.**

# easy to take

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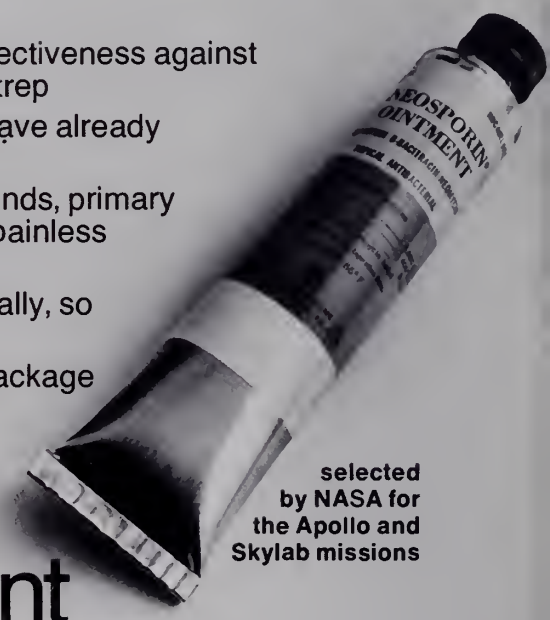


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**WARNING:** Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended

When using neomycin-containing products to control secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as a failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.

**PRECAUTIONS:** As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

**ADVERSE REACTIONS:** Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.

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UNIVERSITY OF MIAMI SCHOOL OF MEDICINE—DEPARTMENT OF MEDICINE

## FIFTEENTH ANNUAL POSTGRADUATE COURSE

# "INTERNAL MEDICINE 1980"

## March 9-14, 1980

## AMERICANA HOTEL BAL HARBOUR, FLORIDA

**THE OBJECT OF THIS COURSE, THE FIFTEENTH IN ITS SERIES, IS TO PROVIDE AN ANNUAL UPDATING OF THE MOST USEFUL RECENT ADVANCES IN THE DIAGNOSIS AND MANAGEMENT OF INTERNAL MEDICAL DISORDERS AS THEY ARE ENCOUNTERED BY PRIMARY CARE PHYSICIANS AND PRACTICING SPECIALISTS.**

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## HIGHLIGHTS

**VIDEOTAPE SYMPOSIA OF TOPICS FOR BOARD REVIEW IN INTERNAL MEDICINE**

Selected topics in Internal Medicine updated by the University of Miami faculty and primarily designed for physicians preparing for Board certification in Internal Medicine will be shown every evening.

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# FROM THE EDITOR'S DESK

## FTC RULING

FMA President Richard S. Hodes, M.D., believes the Federal Trade Commission's October ruling on advertising by physicians will lead to inflation of health care costs. The FTC contends the American Medical Association violated the FTC ACT by restricting its members from advertising for and soliciting patients. Said Dr. Hodes of the ruling: "It could encourage promotional advertising to the extent that the health care system would be overloaded enough to drive the cost up."

## DENTAL HYGIENE

The FTC now has begun an invasion of the dental profession. The Commission staff said efforts will be made to strike state restrictions that require dental hygienists to work under the supervision of dentists. The staff said current restrictions "may retard competition." The American Dental Association has responded that dental hygiene services are only one part of over-all dental care for which ultimate responsibilit rests with the dentist.

## NEW COMMITTEE APPOINTED

Two Florida physicians have been appointed to the new Committee on Accreditation of CME of the American Medical Association. They are: William B. Deal, M.D., of Gainesville, Vice President for Health Affairs and Dean of the College of Medicine, University of Florida; and Charles F. Tate III, M.D., a resident in radiology at the University of Miami School of Medicine. The 22-member Committee, established last summer after the AMA withdrew from the Liaison Committee on Continuing Medical Education, had its organizational meeting November 15-16 in Chicago.

## AMA MEETS WITH HEW

A delegation of high-ranking AMA officers has met with HEW Secretary Patricia Harris and members of her staff. Discussion topics included the medical manpower bill the Administration is preparing, and cost containme Mrs. Harris said she is pleased with the success of the Voluntary Effort in keeping hospital cost increases down, but said the Administration's co containment bill stands in good chance for passage. The Secretary indicated she would rely heavily on Assistant Secretary for Health Julius Richmond, M.D.

## LANNING EXTENDED

President Carter has signed a three-year extension of the Health lanning Law. The bill does not include a requirement in the present law hat state and local planning decisions must conform to national guidelines et by the Department of HEW. Certificate-of-need for doctors' offices pplies only in cases in which equipment costing more than $150,000 is to e used for hospital patients.

## PPROPRIATIONS

President Carter has signed a bill authorizing $45 million over three ears for disease prevention and health promotion programs in the epartment of HEW. The law also authorized an additional $12 million for he National Health Service Corps, and a one-year, $103 million extension f federal aid for nursing education.

## 972 MEDICARE AMENDMENTS

The AMA has urged Congress to repeal Section 227 of the 1972 Medicare mendments. The section, which would classify the services of teaching hysicians as inpatient hospital services reimbursable under Medicare Part , has never been implemented. Addressing the House Commerce Subcommittee n Health, Dr. Fairfield Goodale, Dean of the Medical College of Georgia, hat AMA has always maintained the section's provisions would lessen the uality of patient care and the strength of medical education.

## MA OPERATING BUDGET

AMA trustees have approved a 1980 operating budget that calls for 62,342,000 in spending. Income is anticipated to amount to $67.4 million, llowing for more than $5 million to be allocated to reserves. Spending ill be allocated among program areas as follows: Scientific Policy and nformation, $22,379,000; Assure the Quality of Medical Care, $10,903,000; epresent the Medical Profession, $8,059,000; Strengthen Organized Medicine 6,608,000; Socioeconomic Policy and Information, $4,800,000; and Support ervices, $8,143,000.

## HYSICIAN'S NET INCOME

The average net income of American physicians rose 5.3% per year etween 1970 and 1978. The AMA's Center for Health Services Research, hich reported the figure, said this was less than the 6.7% average yearly ncrease for all goods and services as measured by the Consumer Price Index

**The Editor**

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This program, underwritten by CNA Insurance's Continental Casualty Company of Chicago, is being updated to provide even more effective insurance protection for our members . . . protection which meets today's needs at the lowest possible premium rate.

The new Income Protection Program offers members a greater selection of coverage options. It provides benefits from $25 to $450 per week, beginning the 31st, 61st, 91st or 181st day of total disability. Members may also select between a plan which pays benefits for up to five years or one which pays benefits up to age 65. This wide variety of coverage options allows members to tailor plans to fit their personal situations. It also helps eliminate duplicate benefits, resulting in more comprehensive and economical coverage.

The insurance industry practice of allowing an insured to purchase coverage up to 60% of his or her income also has been adopted by our revised program. This figure, used industry-wide, is the spendable income received after taxes and other payroll deductions have been taken into consideration. Since disability benefits are tax-free, the 60% figure represents the amount of coverage needed to duplicate our member's "take home" salary. The company restricts its participation with other loss of time plans to a maximum of $3,500 monthly income.

The Florida Medical Association's disability program was revised only after a careful study revealed modifications were needed to stabilize and modernize the plan. The new Income Protection Program is better able to provide the coverage needed today, to meet the financial problems caused when an accident or illness results in total disability.

For further information concerning the Plan, contact
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BULLETIN FROM THE EVP'S OFFICE

FMA
# gray paper

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(Editor's Note: Following is a condensation of a recent issue of the "FMA Gray Paper")

October 26, 1979 No. 79.5

**COURT RULES IN FMA'S FAVOR** In the suit brought to enjoin the Department of HEW permanently from publishing a list which identifies by name every physician in the United States who treated Medicare beneficiaries in 1977 and states the amount of income he or she received from that program in that year, FMA has prevailed. Judge Charles Scott, presiding for the Federal District Court for the Middle District of Florida in Jacksonville, narrowed the question as to whether or not the Secretary of HEW may disclose information concerning the annual amounts of reimbursement paid to medicare providers in a way that would individually identify at least some of the providers. Judge Scott's opinion further stated that this question carries with it a clash of two basic rights: (1) the right of citizens to have free accesss to knowledge about the operation of their Government, and (2) their right to be free from unwarranted intrusions by Government into their personal lives and private affairs. In ruling on these issues Judge Scott held that disclosure of the list of annual reimbursements to individually identified physicians under the Medicare Act (1) is exempt from required disclosure under the Freedom of Information Act because it would "constitute a clearly unwarranted invasion of personal privacy," (2) and is prohibited by the Privacy Act from disclosures without the prior written consent of each affected individual.

**FMA SUPPORTS APPEAL OF FTC ADVERTISING ORDER** The Florida Medical Association is in full support of AMA's position that the ethical principle of the Association has not prevented physicians and medical organizations from disseminating information on the prices and services they offer as charged by the FTC. FMA fully concurs in the actions of AMA seeking an appeals court reversal of the FTC order. The Commission's decision is based on the FTC's complaint issued in December, 1975. That complaint charged the AMA with violating Section 5 of the FTC Act by restricting the ability of their members to advertise for and solicit patients and to enter into various contractual arrangements in connection with the advertising of their services to the public.

- more -

**WHO INVESTIGATES COMPLAINTS?** The question was raised regarding matters normally handled by county medical societies prior to passage of the new Medical Practice Act. FMA legal counsel has responded that: "The revised Medical Practice Act and the revisions contained in Chapter 79-36, which relates to the Department of Professional Regulation, has in no way changed the responsibility of the county medical society for investigating and taking action upon alleged breaches of medical ethics or other medical society bylaws. The Medical Practice Act, in Section 458, continues to maintain the requirement that disciplinary actions be made to the Department as opposed to the Board of Medical Examiners. In summary, it is not felt that either of the aforesaid mentioned statutes have in any way substantively changed the traditional function of the County Medical Society Boards of Censors or Grievance Committees."

**SENATE PASSES FIRST MAJOR DRUG LAW IN 17 YEARS** S 1075, among other changes to the nation's drug law, would authorize the FDA to: Place limited distribution conditions on certain drugs by limiting their use to only certain physicians, facilities, indications and dosages; require patient package inserts for nearly all prescription drugs, with almost no authority for a physician to prevent distribution of the insert to a patient; and determine the safety of a prescription drug on factors other than its safety when used as intended under physician supervision. There has been no activity in the House of Representatives on drug law reform; however, passage of S 1075 could now encourage House action.

**FMA, OTHER ORGANIZATIONS CALL FOR REDRAFTING OF STATE HEALTH PLAN** "because of its inadequacy." The South Florida Hospital Association composed of 54 offices in Dade, Broward, Monroe, Collier and Palm Beach counties along with the Florida Hospital Association joins FMA in this action. Speaking at a public hearing conducted by the State Health Coordinating Council, Paul J. Popovich, M.D., chairman of FMA's Committee on HSA's said: "The greatest emphasis of the 1979 Florida State Health Plan is not planning. It is instead a forum to recommend legislation to regulate cost. Cost is important and needs to be addressed but so do the expectations and demands of the people. Both factors must be kept in mind during the planning process, or you may end up in a situation where preoccupation with cost results in rationing of health and medical care. If rationing of care is what the SHCC feels should be done, I recommend that next year's plan include a fascicle entitled, 'Rationing of Health and Medical Care', so that all Floridians can have an opportunity to express their desires as to what will and will not be available or readily accessible to them."

**SDC FOLLOWS DHRS REQUEST AND REPROCESSES ALL PHYSICIAN CLAIMS** between January 1, 1978, and August 31, 1979, according to Robert B. Williams, Deputy Assistant Secretary for Medicaid. As a result of the reprocessing, many previously denied claims have been paid. Some have been voided and the amount previously paid offset against future payments. An explanatory letter has been sent to all participating physicians.

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**Sunday, March 9, 1980** **HYPERTENSION SEMINAR.** *Chairman:* John H. Laragh, MD, Cornell Medical Center, New York. *Speakers:* John H. Laragh, MD (New York); Frank A. Finnerty, Jr., MD (Washington, D.C.); Ray W. Gifford, Jr., MD (Cleveland); Francesco del Greco, MD (Chicago); Thomas A. Kieth,III, MD (Cincinnati); David T. Lowenthal, MD (Philadelphia); Colman Ryan, MD (San Francisco); and Robert C. Tarazi, MD (Cleveland).

**Monday, March 10, 1980** **WHAT'S NEW IN MEDICINE? SEMINAR.** *Chairman:* Michael E. DeBakey, MD Baylor College of Medicine, Houston. *Speakers:* Michael E. DeBakey, MD (Houston); Marco Caine, MD (Jerusalem, Israel); Frank H. DeLand, MD (Lexington, Ky.); Bernard F. Germain, MD (Tampa); David L. Horwitz, MD (Chicago); Ruth Jackson, MD (Dallas); Leon O. Jacobson, MD (Chicago); Alfred S. Ketcham, MD (Miami); George R. Prout, Jr., MD (Boston); Ronald J. Scott, MD (Fort Lauderdale); James I. Tennenbaum, MD (Columbus, OH.); C. Craig Tisher, MD (Durham); and Harrison D. Willcutts, MD (West Springfield, MA.).

**Tuesday, March 11, 1980** **DIGESTIVE DISEASES SEMINAR.** *Chairman:* Arvey I. Rogers, MD, University of Miami. *Speakers:* Arvey I. Rogers, MD (Miami); Martin Kalser, MD (Miami); Joe U. Levi, MD (Miami); Eugene Schiff, MD (Miami); Leon Schiff, MD (Miami); and Elliot Weser, MD (San Antonio).

**Wednesday, March 12, 1980** **CANCER SEMINAR.** *Chairman:* R. Lee Clark, MD (University of Texas System Cancer Center, Houston. *Speakers:* R. Lee Clark, MD (Houston); Roy Ashikari, MD (New York); Hugh R.K. Barber, MD (New York); Albert Bothe, Jr., MD (Boston); Frank H. DeLand, MD (Lexington, KY.); Philip R. Exelby, MD (New York); Victor Fazio, MD (Cleveland); Alfred S. Ketcham, MD (Miami); Gerald P. Murphy, MD (Buffalo); George R. Prout, Jr., MD (Boston); and Charles L. Vogel, MD (Miami).

**Thursday, March 13, 1980** **UROLOGY SEMINAR.** *Chairman:* George R. Prout, Jr., MD, Harvard Medical School, Boston. *Speakers:* George R. Prout, Jr., MD (Boston); Marco Caine, MD (Jerusalem, Israel); Robert Krane, MD (Boston); Edwin M. Meares, Jr., MD (Boston); Frederick K. Merkel, MD (Chicago); Gerald P. Murphy, MD (Buffalo); Thomas J. Rohner, Jr., MD (Hershey, PA.): and Robert H. Rubin, MD (Boston).

**Friday, March 14, 1980** **NUTRITION/HYPERALIMENTATION SEMINAR.** *Chairman:* George L. Blackburn, MD, PhD, Harvard Medical School, Boston. *Speakers:* George L. Blackburn, MD, PhD (Boston); Bruce R. Bistrian, MD, PhD (Boston); Johan Bjorksten, PhD (Madison, WI.); Albert Bothe, MD (Boston); David L. Horwitz, MD, PhD (Chicago); Herbert P. Sarett, PhD (Evansville, IN); Philip L. White, ScD (Chicago); Harrison D. Willcutts, MD (West Springfield, MA.).

**Saturday, March 15, 1980** **COSMETIC SURGERY SEMINAR.** *Chairman:* Pierre Guibor, MD (New York).

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# Professional Liability Legal Update

## Florida Medical Mediation Act Declared Unconstitutional

A Circuit Court Judge in Miami has recently declared the Florida Medical Mediation Reform Act to be unconstitutional. Although the Circuit Court recognized that the Florida Supreme Court had upheld the constitutionality of the Act in its 1976 decision in *Carter v. Sparkman*, it felt that the Supreme Court did so based upon a finding that a medical malpractice "crisis" existed in the State of Florida at the time the legislation was enacted. The Circuit Court was of the opinion that had it not been for the existence of this "crisis" the Supreme Court would have held that the Act exceeded the outer limits of constitutional tolerance. The Circuit Court further felt that additional grounds of unconstitutionality had been presented to it that had not been addressed by the Court in *Carter*. Based upon these two factors, the Circuit Court apparently considered itself free to once again consider the constitutionality of the Medical Mediation Act.

As to the issue of the existence of a "crisis" the Circuit Court felt that it could take "judicial notice" of the fact that "to the extent (the crisis) ever existed, has certainly passed." The Court apparently arrived at this conclusion based solely upon two exhibits submitted by plaintiffs at the hearing. The first was a one page exhibit which contained underwriting data from the Florida Joint Underwriting Association. The second exhibit was a consolidated report of the finances of the Florida Physician's Insurance Reciprocal. On the strength of these two exhibits, the Judge concluded that "the malpractice insurance crisis" has certainly passed and, along with it, the primary justification for imposing the substantial pre-litigation burden on medical malpractice claimants."

In addition to its holding that since the malpractice insurance crisis had passed the Medical Mediation Act was no longer constitutionally permissible, the Court held that several other factors rendered the act unconstitutional, including:

(1) the requirement that parties pay the attorney and physician members of the Mediation Panel $100 per day for "expenses";

(2) the costs incurred by a claimant in preparation for mediation proceedings was considered to be substantially greater than that envisioned by the Supreme Court;

(3) the mediation statute does not act as a screening process to weed out frivolous claims but, rather, because of the costs involved limits acceptance by attorneys to those malpractice cases in which the potential damage recovery exceeds $75,000;

(4) the admission of the mediation panel's finding into evidence without opportunity for cross examination denies the claimant the right to an effective jury trial; and

(5) the Act places additional burdens on an already overburdened judicial system thereby delaying access to the Courts for non-medical malpractice litigants.

Based upon the foregoing, the Circuit Court held that the Florida Medical Mediation Reform Act was in violation of the Florida and United States Constitutions.

As pointed out by defense counsel in the Circuit Court proceedings, the action of the Judge in declaring the Mediation Act unconstitutional is highly questionable for several major reasons. First, the Florida Supreme Court has previously reviewed the Act and found it to be constitutional. It was argued that it is not the province of a Circuit Court to attempt to overrule a decision of the Supreme Court. At the very least, if the Circuit Court had doubts about the constitutionality of the Act, it should have certified the constitutional question to the Supreme Court for a decision. Secondly, it was submitted that the evidence offered by plaintiff in support of its argument that the medical malpractice crisis had disappeared was totally insufficient. Thirdly, it was asserted that, contrary to plaintiffs' assertions, the constitutional arguments presented to the Circuit Court had previously been considered and decided by the Supreme Court in *Carter v. Sparkman*. And lastly, it was pointed out that the determination of the existence or non-existence of a medical malpractice insurance crisis could be made only by the legislature and not by a Circuit Court Judge in Miami. The action of the Circuit Court in declaring the Mediation Act unconstitutional on the grounds that a malpractice crisis no longer existed was argued to be an unlawful invasion by the judiciary into the legislative province.

This decision will be appealed to the Florida Supreme Court and the Florida Medical Association plans to participate as *amicus curiae* in the appeal. *Kelly v. Ruben (Case No. 78-15303, Opinion filed October 25, 1979).*

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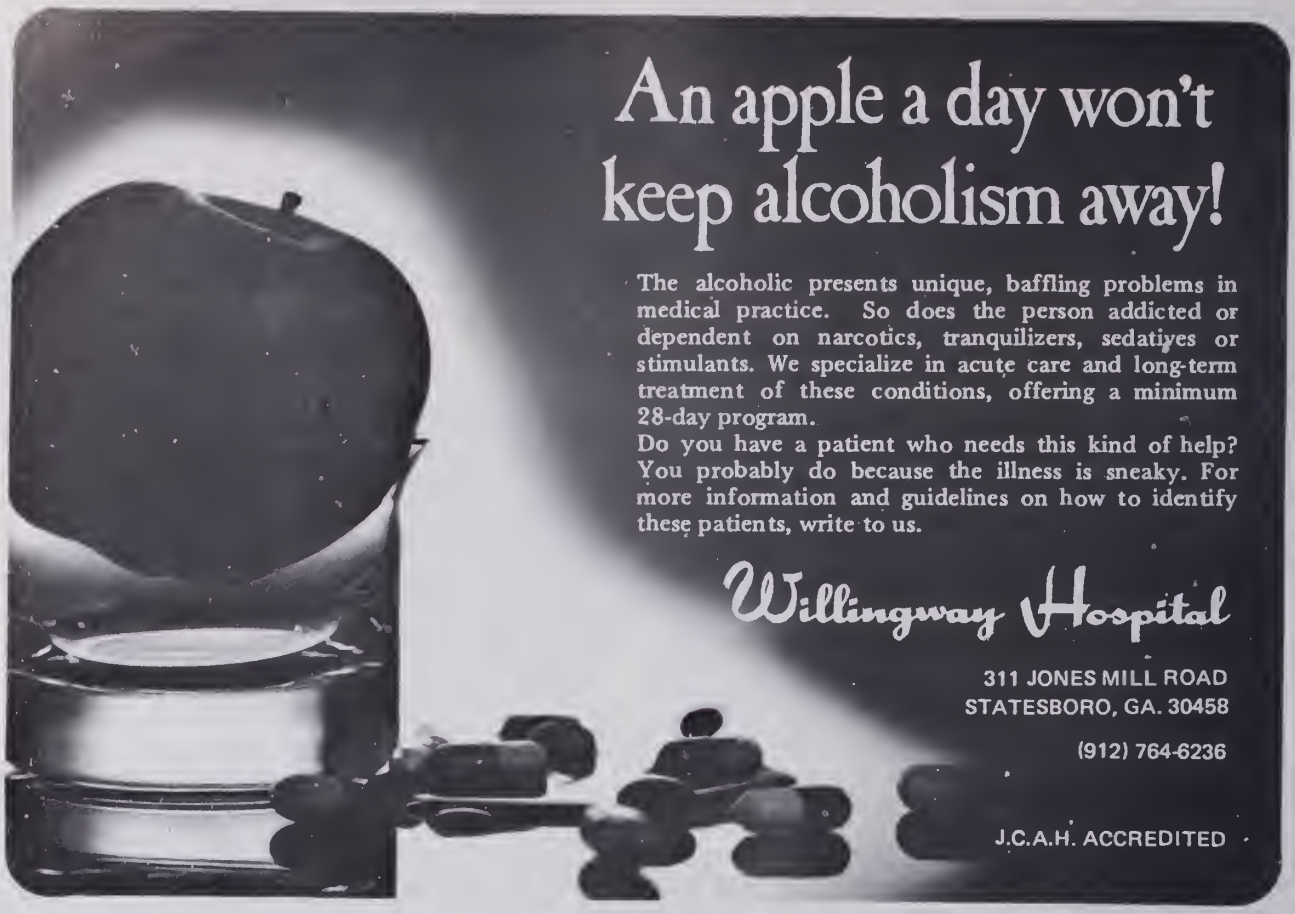
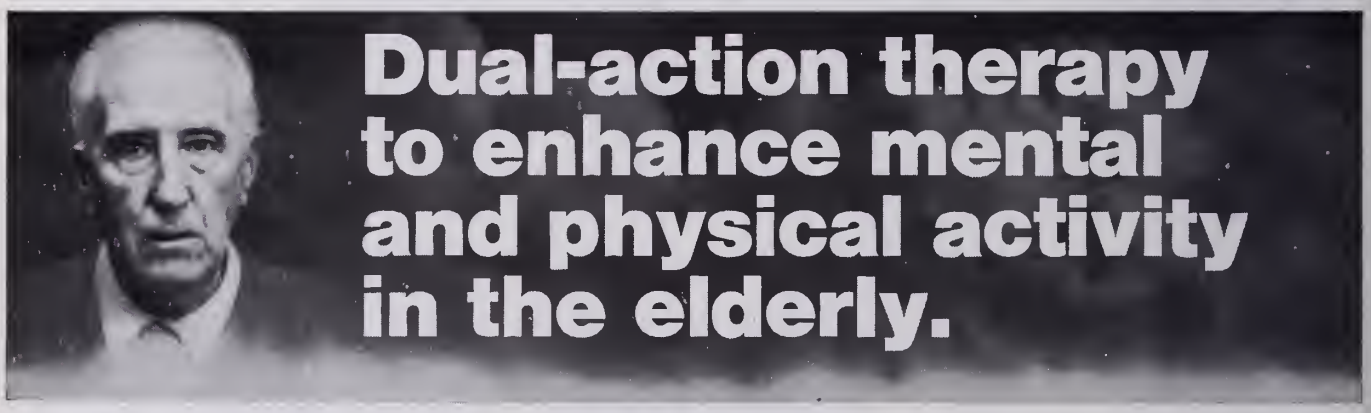
Prepared and submitted by John E. Thrasher, J.D., Vice President and Legal Counsel and Anthony J. McNicholas, III, J.D., Associate Legal Counsel, Professional Insurance Management Co., (PIMCO), Jacksonville, Florida.

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# Unexpected Malignant Gynecologic Diagnoses Made Postoperatively

Phillip A. Caruso, M.D., FACOG, FACS

**Abstract: The management of gynecologic malignancies diagnosed initially in the pathology laboratory following primary surgery is discussed. Too often expediency rather than sound clinical judgment dictates further treatment while the author bases his approach solely on the clinicopathologic behavior of the individual lesions.**

In spite of a high index of suspicion and adequate preoperative evaluation, the gynecologic surgeon is not infrequently frustrated to learn the final pathologic report discloses a much more serious diagnosis than anticipated. Guilt and self-reproachment are followed by attempts to determine the proper course to pursue. The total experience of one's colleagues is often either superficial or inconsistent and a review of the literature seldom resolves the issue. Too often, expediency, rather than sound clinical judgment, dictates further management. It is the purpose of this paper to review such unfortunate gynecologic problems, to critically evaluate alternate methods of treatment, and to advise subsequent therapy.

## Vulva

It is impossible to overemphasize the necessity to establish a precise diagnosis prior to the surgical treatment of a patient who has vulvar disease. While carcinoma of the vulva is the most accessible of all gynecologic malignancies, it remains the least competently diagnosed and treated genital cancer in women. Biopsy of any and all suspicious lesions remains the sine qua non of early diagnosis and the toluidine blue staining technique is not only useful in selecting the best sites for biopsy but it is also helpful in defining the limits of surgical excision.

Adequate attention has heretofore been given to the definition and treatment of Bowen's disease, Paget's disease of the vulva, erythroplasia of Queyrat, and squamous cell carcinoma in-situ, not to mention leukoplakia and intractable pruritus vulvae. It is not the author's intention to evaluate local wide excisional biopsy, unilateral vulvectomy, total vulvectomy, or the so-called skin-shaving procedure and their proper application to the above diagnoses but rather to render consultation regarding the management of a patient in whom a postoperative diagnosis of invasive squamous cell carcinoma of the vulva is made.

Regardless of what procedure was initially carried out, once a diagnosis of invasive carcinoma is established, a complete tumor survey and a detailed medical evaluation of the patient is in order. Vulvar cancer is generally regarded as a disease of old age and is frequently found in association with obesity, diabetes, cardiovascular disease, and unrelated malignancies in other parts of the body, especially in the breast, cervix, urethra, vagina, and about the head and neck. Thus,

From the Department of Obstetrics and Gynecology, University of Miami School of Medicine, Miami.

these patients should have a thorough physical examination, a complete blood count, urinalysis, serological test for syphilis, serum electrolytes and chemistry profile, a blood volume determination, an electrocardiogram, chest x-ray, metastatic bone survey, intravenous pyelography, barium enema, and cystoscopic and sigmoidoscopic examinations.

In the absence of distant metastasis and upon medical clearance, including consultation with the anesthesiologist, the patient is prepared for surgery. The operation of choice includes a radical vulvectomy and bilateral resection of the superficial and deep femoral and inguinal lymph nodes. Deep pelvic retroperitoneal lymphadenectomy is reserved for those cases with involvement of the distal vagina, clitoris, or pathologically proven inguinal node metastasis. The decision to eliminate routine deep pelvic lymph node dissection relates to clinically substantiated evidence that operative morbidity and mortality is definitely reduced, such extended surgery is rarely indicated in the absence of inguinal node metastasis, and the extirpation of positive deep pelvic lymph nodes is not associated with a significantly improved five-year survival rate.

A wide vulvectomy as described by Nelson[1] is mandatory for the adequate treatment of invasive vulvar carcinoma. The labia majora and minora, the clitoris, and the underlying fibrofatty tissue down to the fascia are removed. The lateral limit of the dissection is the labiocrural fold along the outer limits of the labia majora while the medial excision line is placed outside the hymen and superior to the urethra. The multicentric foci of origin of this malignancy and, to a lesser degree, the concern of spread of cancer of the vulva in and beneath the skin as has been clearly demonstrated to occur in breast cancer dictate wide skin margins. Admittedly, such an operation in the elderly patient is a formidable procedure but the clinician who is tempted by virtue of the size, location, or histologic grade of the primary lesion or the preoperative clinical assessment of the inguinal nodes to perform less than radical surgery as outlined above must accept full responsibility for a decreased five-year survival rate.

Lesions involving the bladder, upper vaginia, and anus require ultraradical surgery and are often best performed in multiple stages.

## Cervix Uteri

An all too familiar gynecologic problem is the unintentional removal of carcinoma of the cervix by routine hysterectomy. In spite of the increasing use of the cytologic smear as a routine screening method for the early detection of cervical malignancy, most cancer centers report little change in the incidence of patients referred for the postoperative management of invasive cervical cancer following inadvertent hysterectomy.[2] The incidence of undiagnosed cervical cancer in hysterectomy specimens continues to represent 1 to 2 percent of all known cases of cervical malignancy.[3,4] While explanations advanced by such centers include the increasing number of hysterectomies performed annually and the relatively recent trend away from subtotal hysterectomy,[5] critical review of such cases reveals a large percentage of patients in whom no diagnostic appraisal of the cervix had been carried out prior to surgery. This is especially true in cases operated upon with the tentative diagnosis of leiomyomata uteri or pelvic inflammatory disease wherein little thought had been given to the possibility of coexistent cervical malignancy.

The management of patients with carcinoma of the cervix who had hysterectomy in the presence of unsuspected cancer, or regrettably, as the intended treatment of known invasive cervical cancer, has been the subject of many interesting though often misleading papers. No single institution has had a sufficient number of cases to statistically compare radiotherapeutic and operative modalities of treatment and consequently most papers report a single therapeutic approach. Likewise, except for Durrance,[6] most authors fail to relate the extent of disease present postoperatively thereby rendering their data incomparable. Finally, earlier papers relate already outdated surgical and radiotherapeutic methods. As Cosbie[7] noted, "There is nothing comparable between the 180 kv. x-ray therapy of the early years and the cobalt 60 or 22 mev. batatron therapy available today."

The author recognizes a wide variety of clinical situations following the diagnosis of carcinoma of the cervix after inadvertent hysterectomy. On the basis of physical examination, histopathologic diagnosis, and a detailed tumor survey, six distinct groups of patients with disease processes ranging from intraepithelial carcinoma to distant metastasis may be identified. (Table 1).

Groups I and II correspond to carcinoma of the cervix stages 0 and IA respectively and therefore simply require frequent follow-up pelvic examinations with vaginal cytologic smears. The more advanced cases in groups II and IV, because of the risk of parametrial or lateral pelvic wall disease, demand further treatment. Recent reports indicate that total pelvic irradiation in combination with intravaginal radium delivered to patients with no known residual cancer after hysterectomy yields a five-year survival rate in the range of 75 to 80 percent.[6,7] On the contrary, patients with known residual tumors or positive biopsies (group V), though salvagable by external total pelvic irradiation

**Table 1. — Patient Classification: Carcinoma of the Cervix**

| Group | |
|---|---|
| I | Intraepithelial carcinoma |
| II | Early stromal invasion; margins clear |
| III | Frank microscopic invasion or a gross lesion; margins clear |
| IV | Frank microscopic invasion or a gross lesion; margins not clear though no known gross residual disease |
| V | Known gross residual disease or a positive biopsy |
| VI | Distant metastasis |

**Table 2. — General Therapeutic Plan: Carcinoma of the Cervix**

| Group | Treatment |
|---|---|
| I | Close follow-up |
| II | Close follow-up |
| III | Total pelvic irradiation to 4000 rads followed by two radium applications of 6000-7000 rads surface dose, 1-2 weeks apart |
| IV | Total pelvic irradiation to 5000 rads followed by one radium application of 4500-5500 rads surface dose |
| V | Laparotomy with the intent to perform radical pelvic surgery including total pelvic exenteration |
| VI | Chemotherapy |

followed by intravaginal radium, manifest such a poor survival rate that they warrant laparotomy with the intent to perform radical pelvic surgery, i.e. total pelvic exenteration.

Finally, patients in group VI with disease which has extended beyond the true pelvis should be considered candidates for chemotherapy.

## Corpus Uteri

Adenocarcinoma of the endometrium is the second most common malignancy of the female genital tract and, not infrequently, the diagnosis is first made from the histologic examination of the uterus following routine hysterectomy. The most common errors in the diagnosis of endometrial carcinoma remain: 1. failure to investigate irregular bleeding in the menstruating woman, 2. correction of only the obvious causes of vaginal bleeding, 3. reliance on cytology, 4. reliance on endometrial biopsy or lavage, 5. inadequate curettage (Table 4).

While embarrassing to the surgeon, the post-operative diagnosis of endometrial adenocarcinoma is not as distressing as an inadvertent hysterectomy in the face of carcinoma of the cervix. This most certainly relates to the greater acceptability of combination therapy for endometrial adenocarcinoma. Moreover, while most institutions adhere to a standard protocol of preoperative irradiation followed by surgery, there appears to be a trend afoot to determine if survival can be improved by more accurately tailoring irradiation therapy based on the meticulous pathologic examination of the uterus and adnexa uteri.

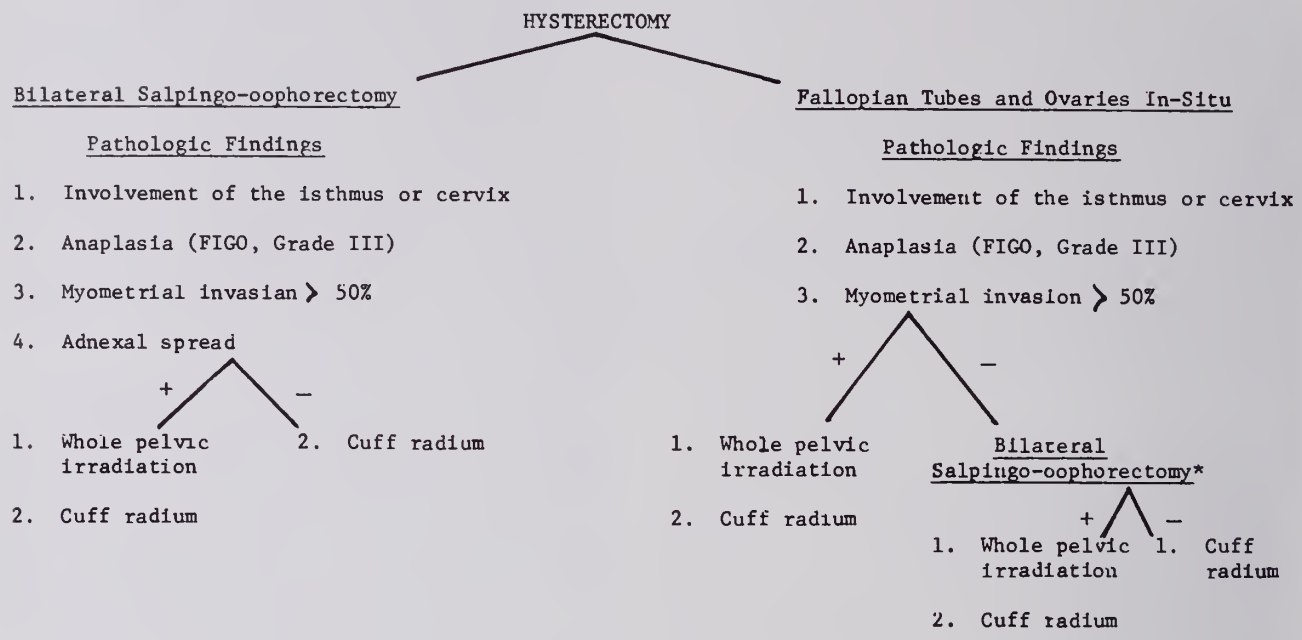
In proposing a treatment plan in the management of endometrial adenocarcinoma following hysterectomy, the author accepts only those patients with in-situ lesions or an early well-differentiated adenocarcinoma confined to the endometrium to have been adequately treated. Likewise, while allowing there is no absolute statistical evidence to support the necessity of bilateral salpingo-oophorectomy in such early lesions of the endometrium, the author subscribes to the policy of re-operation for extirpation of the uterine adnexa.

More advanced cases of endometrial adenocarcinoma require the consideration of specific clinical-pathologic data. It is generally agreed that involvement of the isthmus or cervix indicates the need for treatment of the lower parametrial lymphatic channels and primary pelvic lymph nodes. Likewise, ovarian involvement represents lymphatic permeation and metastasis rather than contiguous spread and therefore dictates a radiotherapeutic field which encompasses the lateral pelvic walls. Gusberg[8] noted a significant correlation between anaplasia and both depth of myometrial invasion and patient mortality while Morrow, et al,[9] found that both the depth of uterine muscle invasion and, to a lesser degree, the histologic grade of the tumor correlated with patient survival and pelvic lymph node metastasis.

Utilizing the above clinically correlated pathologic data, the author recommends routine cuff radiation in all patients with more than a well-differentiated adenocarcinoma limited to the endometrium. Those patients with recognized unfavorable prognostic features such as isthmic or cervical involvement, anaplasia (FIGO, grade III), myometrial invasion deeper than 50 percent and adnexal spread are considered candidates for additional external beam therapy.

Leiomyosarcoma is the most common nonepithelial malignant tumor of the uterus. Seldom does the patient's history or physical examination or the clinician's diagnostic evaluation allow the distinction between

Table 3. GENERAL THERAPEUTIC PLAN: ADENOCARCINOMA OF THE ENDOMETRIUM




*The presence of extrapelvic disease at the time of laparotomy requires individualized management.

leiomyosarcoma and a rapidly enlarging benign leiomyoma. Rather, the diagnosis is often made in the pathology laboratory.

Histologic criteria for establishing the diagnosis of leiomyosarcoma varies from one institution to another. Some pathologists accept cellular abnormalities as diagnostic while others require evidence of myometrial invasion. The author recognizes the occasional bonafide diagnosis of leiomyosarcoma on the basis of cellular abnormality alone but the excellent 5-year survival rate of this group of patients as compared to those in whom there is evidence of myometrial invasion leads one to suspect a significant error in diagnosis in the former cases, perhaps misinterpreting degeneration for sarcomatous change.

The proper treatment of the patient in whom the diagnosis of uterine leiomyosarcoma is made postoperatively depends upon the original procedure, the patient's age, and the presence of distant metastasis subsequent to a complete tumor survey. Few would argue with the desirability to perform a total hysterectomy in the absence of distant metastases following a primary myomectomy. Adnexectomy in such cases or re-operation with the intent to perform bilateral salpingo-oophorectomy following definitive hysterectomy does not contribute to the patient's salvage rate.

Radiation therapy is reserved for local recurrence while chemotherapy is the treatment of choice for distant metastases.

The management of patients with mesenchymal sarcomas, i.e. endometrial stromal sarcoma, carcinosarcoma, and mixed mesodermal tumors is essentially the same as that proposed for uterine leiomyosarcoma.

Malignant vascular tumors of the uterus, though extremely rare, compose yet another group of lesions often diagnosed only after histologic examination following hysterectomy for benign disease. While hemangioendothelioma (hemangiosarcoma) is quite maligant, hemangiopericytoma, often confused with endolymphatic stromal myosis, may be considered relatively benign. The former diagnosis warrants postoperative pelvic irradiation reserving chemotherapy for the treatment of extra-pelvic metastasis. The malignant nature of hemangiopericytoma, in the absence of metastasis can be determined only by the subsequent clinical course of the patient consequently necessitating only assiduous postoperative follow-up care. Not unlike leiomyosarcoma, the author does not encourage re-

**Table 4. — Common Errors in the Diagnosis of Endometrial Adenocarcinoma**

1. Failure to investigate irregular bleeding in menstruating women
2. Correction of only the obvious causes of vaginal bleeding
3. Reliance on cytology
4. Reliance on endometrial biopsy or lavage
5. Inadequate curettage

operation for the sole purpose of performing a bilateral salpingo-oophorectomy.

Finally, let us briefly consider the postoperative management of those patients in whom the diagnosis of trophoblastic disease is initially rendered following hysterectomy. The risk of hydatidiform mole is not analogous to other precancerous lesions in that a gradation of morphologic change toward malignancy is lacking. Moreover, hysterectomy does not eliminate the possibility of developing subsequent choriocarcinoma. Baseline studies should include an hematologic profile, liver enzyme studies, P.A. and lateral chest x-rays, and a radioimmunossay of the B-subunit of human chorionic gonadotropin. A liver scan and/or brain scan are ordered when appropriate. Further treatment is dictated by the results of frequent and systematic pelvic examinations and serological radioimmunossay studies. The author is opposed to routine prophylactic chemotherapy.

The patient presenting a diagnosis of choriocarcinoma post-hysterectomy is best managed by performing a tumor survey including the aforementioned baseline studies and starting single agent chemotherapy daily for five days with either Actinomycin D, 12 mcg/Kg/day, IV, or Methotrexate, 0.4 to 0.5 mg/Kg/day, IM. Combination chemotherapy is reserved for the high risk patients in whom the duration of disease is in excess of four months or in whom the HCG titer is greater than 100,000 IU/24 hours. Adjuvant radiotherapy is employed for those patients with brain or liver metastasis.

## Oviduct

The diagnosis of adenocarcinoma of the oviduct is more often than not, made in the pathology laboratory. Since the true nature of the disease process is unsuspected until the fallopian tube is sectioned, inadequate surgery is frequently the rule rather than the exception. If less than a total abdominal hysterectomy with a generous vaginal cuff and bilateral salpingo-oophorectomy have been performed, then completion of this procedure is warranted on the basis of a report of 26% bilaterality of primary oviductal carcinoma.[10]

Since the anatomical location and spread of oviductal carcinoma is similar to ovarian cancer, postoperative treatment is recommended in all cases except for carcinoma in-situ. Irradiation therapy in a dose of approximately 5000 rads in a period of five weeks may be utilized in cases where the disease process appears to be confined to the pelvis. Extrapelvic spread requires the use of chemotherapy.

## Ovary

No other organ in the human body lends itself to such a spectrum of histogenetically different tumors as does the ovary. This fact together with a number of variables including the age and parity of the patient, histologic grade of the lesion, potential bilaterality, excrescences on the capsule, rupture at surgery and adherence does not allow simple generalizations about the management of ovarian cancer. Suffice it to say that the surgical procedure of choice remains total abdominal hysterectomy, bilateral salpingo-oophorectomy and greater omentectomy.

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# The Place of Psychiatry in the Teaching and Practice of Medicine Today

**Jess V. Cohn, M.D., F.A.C.P.**

At the very outset of this presentation, I would like to focus our thoughts on the teaching and practice of Medicine as representing a unity, rather than a dichotomy, the unity being a learning experience as a process-in-continuum, developing in the medical neophyte, maturing in the clinician, and continuing uninterruptedly. It is hoped that, in keeping with this attitude, the remarks to follow, while aimed at making the purpose of this preparation meaningful as a documentation of a changing, moving process, will be at the same time a productive instrument in this very learning setting itself, for both narrator and listener.

Psychiatry has its place in the teaching and practice of medicine actually in the very selection of the student and his matriculation in the medical school in the first place, in that he brings with him at least some didactic imprinting of the changing emphasis in the University preparation for Medicine as a "scientific art"; that is, a basic indoctrination in the humanities as well as in the physical and natural sciences. This change is reflected today in the attitudes toward, and the feelings for, the students on the part of the faculty, who have come to regard the students as persons, and as people who, in recognizing the validity of the adage "Physician, Heal Thyself," can adopt, or adapt to, the philosophy of "Physician, Know Thyself." It is on the basis of this recognized need for faculty and students alike to deal with people as well as with cadavers, that courses in Psychiatry are included in the first two years of the medical curriculum as well as in the latter two, formerly commonly regarded as clinical years, in medical school. Psychiatry as a subject to be studied by the medical student is introduced not as a didactic course in psychopathology or as a course regarded as an excursion into the strange world of a hospitalized psychotic population, but as that intra- and extra-personal aspect of biology and sociology on the basis of which behavior is determined. And it is in this kind of indoctrination and steeping that a comfort is experienced later, in the convergence of the paths of the healer and the sick, as physician and patient gel — and liquify — the equation of interpersonal dynamics, in which, science and art are one.

The perfusion of Psychiatry into Medicine, representing a concept of theoretical, hypothetical, and practical movement rather than a sort of cross-sectional stasis, in intensely meaningful today to the whole matrix of Medicine — to the end that an understanding of phasic variations within disease-processes, and in general the understanding of a global kind of overlapping epidemiologies, characterizes the over-broadening compass of the growing student and the perceptive practitioner. While Hippocrates, and Rush, and many others, each in his time, took in his own natural stride such a natural understanding and use of the confluence of soma and psyche, **that was not in cadence with the restricted stride of their contemporaries,** we, today, may regard this concept as a commonplace in our educational renaissance. Thus in our time the student, who becomes later the internist or the surgeon or (certainly) the psychiatrist, learns how to achieve a working ease in his confrontation with the threatening feelings released in his patients apropos of their coronary occlusion anxieties, their obstetrical depressions, their hypertension rages, etc. . . . and, importantly although parenthetically, learns to accept his own limitations of professional know-how and finesse in order to avoid an otherwise wild splash into his patient's presenting defense devices.

In this connection, the intangible needs of the sick are regarded by the student and the clinician as being equally valid, if not indeed more valid, than the bone fractures and the peptic ulcers that bring patient and doctor together — by virtue of which, various phenomena are understood as constituents of presenting sickness; such as morbidophilism and traumatophilism, litigation-mindedness and self-pity and grief, and, in general the psychopshysiologic reactions to such combinations as (for example) over-dependency and abnormally channeled hostility and guilt. No less

important in this same connection is the better awareness on the part of the student and clinician of his own emotional needs and inevitable symbolisms, and the resulting avoidance of iatrogenic influences.

The methods or processes characterizing the mechanics of the renaissance over the past couple of decades to which reference was made above, represent a flow of developments in keeping with the positioning of Medicine in general in the broadening social, cultural, and subcultural settings of our western civilization. As much has derived, in this direction of comprehensive medical sophistication, from extra-medical observations in education, as from the significant lessons learned from residency training and research programs in Psychiatry, and as from the emergence of the teacher from the ivory tower of didacticism.

The continuing studies of human nature as an integral part of the studies of human biology are studies that in fact today are initiated at the first year medical student level. It is only around the corner of the memory of some of us that Psychiatry was regarded as the quasi-medical step-child of the curriculum, structured as the peculiar and particular province of the alienist. Few hours, indeed, were devoted in the third student year, to the demonstration of the behavior of psychotics, equally few to being talked-at by an instructor in the third and fourth years regarding the classification of the neuroses, and fewer yet to medical jurisprudence; in fact, forensic medicine has yet to achieve its deserved place in the curriculum. The concept, however, of the medical doctor as a social as well as a biologic unit who treats people rather than diseases, liberalized the otherwise constricted scope of Psychiatry into a truly medical constituent, and actually commanded the introduction of Psychiatry as a course of study into the first two years, as well as the latter two years, of the college experience.

The obvious and intentional effort is not to create psychiatrists of medical students; but, through their continuing association with people, **now in the climate of medical inquisitiveness and guided practice,** to recognize and to capitalize on the expanding social breadth of Medicine. Throughout the student's college career, his contacts, thus, are geared from the beginning to his knowledgeable use of appropriately indicated psychotherapy in his doctoral years, extending across the biologic spectrum from pediatrics to geriatrics. From the beginning the purpose is to sensitize investigators to sick human beings as being people who could be sick of life and living as well as of nephritis, sick of relatives as well as of angina, sick of a household of little children or of jealousy as well as of migraine, sick of inadequacy or of a deprivation of love, or of whiskey, as well as of pneumonia or brain tumor or hepatitis, sick of free movement in society as well as of the collagen diseases.

Among other things that Psychiatry in Medicine asks of the Aesculapian-dedicated are a satisfying ability to interview; the ability to quantify reasonably the emotional factors in a presenting sickness; the ability to remain alert to normal physiology, to pathophysiology, and to the meaningfulness of organic change as well as appropriately timed re-evaluations in the light of suspicious non-functional development change; the ability to regard ordinary anxiety and the process of repression as being normal and healthy, and thus to be able to comprehend and feel safe with the important issue that deals with the differentiation of clinical from subclinical configurations; and the ability to learn how to use later the plastic margin that defines privilege on the one hand, and wise solicitation of assistance from related and overlapping medical and even non-medical disciplines, on the other hand. Especially referring to a satisfying ability to interview; indespensible to Psychiatry as a psychotherapeutic medium, yet invaluable to Medicine in general, interviewing today **is a process in education in Psychiatry**. It is a prelude to an appreciation of the combination of non-verbal communication as well as verbal, and to the substitution of natural conversation for the traditional question-and-answer relationship between patient and doctor.

These processes themselves contribute to some development of psychotherapeutic sophistication on the part of the student and the non-psychiatrist clinician. Psychotherapy continues to be the outstanding aspect of psychiatric treatment procedures, the understanding of which is an integral part of the teaching and practice of Internal Medicine — and, indeed, of all Medicine. This reference to psychotherapy is a reference essentially to the process of communication in which a listener is a hearer, a looker is a see-er, etc. It might be said, parenthetically, that it is this very function (of language) in the person-to-person equation, that is productively operative in the axiom as we learned it many years ago; namely, "when you cannot make a diagnosis, go back and get more history." This is a primary reference to the meaningfulness of conversational exchange as the preferred medium of communication, and secondarily an inference regarding the place of the interpersonal setting in the effective pursuit of the goal of comfort in living on the part of the sick. Again, peculiar to Psychiatry, but universal in Medicine broadly speaking, the clear reference here is to the concept that the doctor and patient association means not a unilateral function, but a cooperative enterprise, in which the doctor can work only as hard or only as fast — therefore as effectively — as the patient will let him.

Now, notwithstanding the brevity of this composition, primarily because of time-limitation, at least a word must be mentioned about two particular

aspects of the teaching and practice of Psychiatry today. These refer to the inevitable development of the broader acceptance of the psychiatric ward or section in the general hospital, and to the continuing surge of general interest and investigation and hope not only in hypnosis and public health in a psychiatric sense, but in the chemistry of the brain and psycho-neuropharmaceutical therapeusis. Both of these represent expressions of the genuine attempt on the part of Medicine to integrate Psychiatry into its matrix, notwithstanding the possibility of pursuing some will-of-the-wisp features of such an absorption, and the realistic blending of Psychiatry, by its teachers and practitioners, into the Medical trunk whence it springs as a natural branch, in its fashion giving to the trunk in equal measure as it receives from it. A hint is given here that refers to a certain revolution, if you like, occuring in this branch of Medicine; and surely the catalytic action of serendipity, as much as the scientific integrations and research inevitabilities, must be operating mutually here.

Attitudes toward the various aspects or modalities of Psychiatry in general have changed as a matter of necessity and of privilege. By virtue of Freudian understandings and applications, the science of Psychiatry developed an anatomy, physiology, pathology, and therapeusis of its own, just as has cardiology, dermatology, and other medical disciplines. To be sure, a pendular swing has occured not only from the mere Kraepelinian descriptiveness and categorization of mental disease, to another swing to medical psychology of movement rather than static marking-time — but to still another swing again toward the organic and the social (community) concepts of Psychiatry, and, finally, a sort of quivering of the pendulum in that area of hopeful plumb in which the psychologic factor, while representing a final common denominator in the management of intra- and extra-behavioral disturbances, has become joined by the research and practical issues of psychiatrically meaningful neurophysiology, and by the productive efforts in the biochemistry, pathology, and pharmacology laboratories.

References are available from the author upon request.

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# 12 County Jails in Florida Selected For AMA/FMA Jail Project

Twelve Florida county jails have been selected for participation in a year-long jail health project conducted by the American Medical Association and the Florida Medical Association.

Florida jails taking part are those in Alachua, Gadsden, Highlands, Hillsborough, Marion, Monroe, Orange, Palm Beach, Pinellas, Sarasota, Seminole and Wakulla counties, according to FMA President Richard S. Hodes, M.D., of Tampa. The project designed to bring prisoner health care up to AMA accreditation standards, is financed by a grant from the Federal Law Enforcement Assistance Administration.

"There is no question health care for inmates will be vastly improved in all of the jails taking part in the program," Dr. Hodes predicted.

The project is being coordinated by the FMA staff and will involve site visits by Joseph Baird, M.D., of St. Petersburg, a recognized jail health care specialist. Plans, based on Dr. Baird's studies, will be developed for each jail to meet the AMA accreditation standards.

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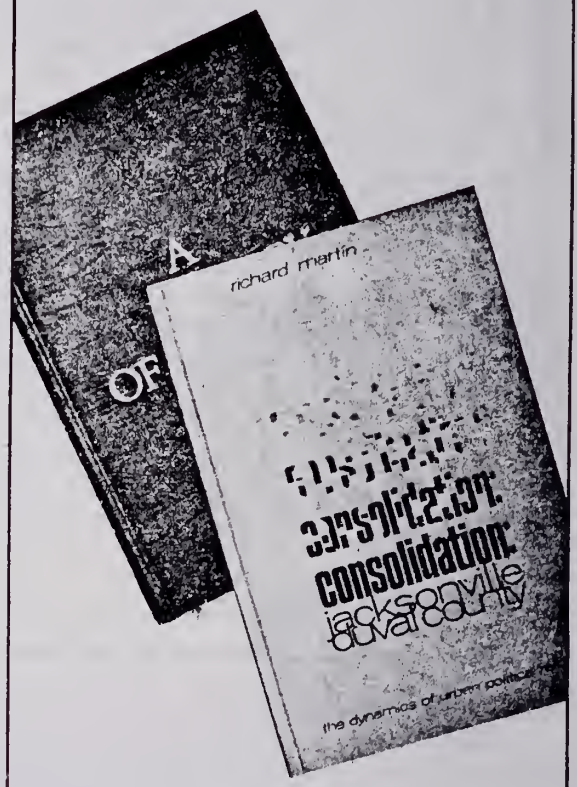


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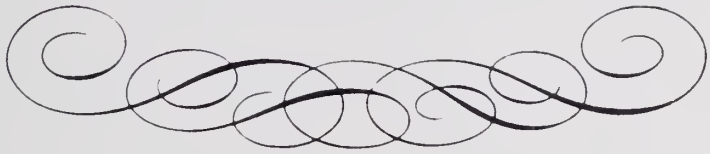
# EDITORIALS



## Christmas 1979

Certain great ideas flow fresh through the ages and inspire us as much today as in the days of old. Some such stem from the teachings of the carpenter's son of Nazareth whose birth has been celebrated by Christian nations at this season for almost 2000 years. Estimating the greatness of man and the mystery of the human soul, He emphasized truth and love in his daily life and taught of compassion for one's fellowman. And over the years from the shamans of primitive tribes to the scientific physicians of today, doctors inspired by these ideals have sought the same goals, through reducing in some degree the sum of man's misery and fighting with courage and honesty the war against disease.

The doctor, the priest, and to some extent the lawyer are permitted to more comprehensively examine and know the individuals comprising society, but the doctor sees men not at their best as does the minister, nor at their worst as does the lawyer, but as they really are. So can he judge more easily where and when to exert his influence to improve the human race, for the betterment of nations and so bring all civilizations nearer to peace on earth. In the spirit of this Babe must we then not only hope for but have faith in our fellowmen, and in spite of their frailties encourage them to be unselfish and honest, generous and forgiving.

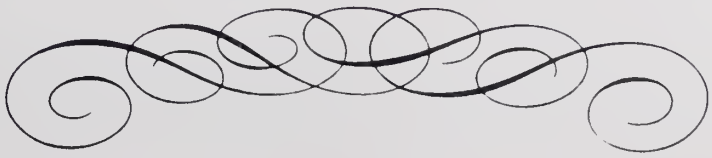
Atune to this season's dominant theme, the physician gives to each concerned patient the gifts of hope and encouragement, the gift of freedom-from-pain to provide the perennial demand for comfort, and the gift of empathy that satisfies the worry of abandonment every human sufferer fears. As life is not breath but action, that is the use of our senses, our mind, our faculties; so should our gift include lessons on the reverence for life and methods to elevate its quality by teaching our patients how to live rather than how to avoid death.

The mind of man is always growing and changing but the love, the hope, the fear and the faith that makes brothers of us all, and the elemental passions of the human heart remain the same. The secret of help by any profession is the capacity to touch and move in vibration with the cord of these emotions. In all honest work there are ultimate rewards but in the practice of medicine, beyond the monetary fees for services rendered, there are less tangible, though nevertheless equally important gifts.

For devotion to duty, for time spent relieving the guilt of relatives of a dying patient, for reassuring an apprehensive frightened individual, for forgetting self, for the many little unremembered acts, the physician receives the gifts of confidence, overwhelming gratitude and love.

So can the practitioner convey the meaning of Christmas.

C. M. C.



# Role of State Government Toward Private Business

**Louis B. St. Petery Jr., M.D.**

Two employees of the Florida Department of Commerce recently addressed the Tallahassee Rotary Club, describing their efforts to promote and stimulate Florida's private business. Sitting there listening, I was suddenly struck by this supportive role of state government towards the private business sector as contrasted with the rather adversarial role which the private medical sector finds in their dealings with the State. Nowhere is this contrast more vivid than in the Florida Medicaid Program.

Often the Department of Health and Rehabilitative Services (DHRS) appears to work diligently to circumvent the private sector. Medicaid patients are discouraged from achieving an ongoing relationship with a primary care physician or group of physicians, since Medicaid sponsors no preventive care or health maintainance. Such an approach encourages the use of less cost-effective episodic emergency room care, and perpetuates second class medical care for many of Florida's poor. The one Medicaid subprogram which includes a bare minimum of preventive care is the Early Periodic Screening Diagnosis and Treatment (EPSDT) Program, covering children up to 21 years of age. EPSDT has been delegated by DHRS exclusively to County Health Departments, except in two DHRS districts where there are small pilot projects utilizing childrens medical services clinics as EPSDT providers. Health departments have minimal or no resources for providing ongoing, comprehensive care. They are usually closed after 5 p.m. and on weekends; children are often screened by nurses. Members of the Florida Pediatric Society have repeatedly asked that those private physicians seeking to provide EPSDT be allowed to do so: DHRS's answer has consistently been "no."

I should point out that there is one program in DHRS which very successfully involves private physicians and utilizes their leadership as well as their advice. That program is Children's Medical Services (CMS), which this year celebrates its 50th anniversary. Clearly CMS has proven that melding of government and private sectors is not impossible.

As long as the private sector continues to have the major resources for expertise and interest in health care, the role of government should be supportive of and complementary to that private sector, if the best interests of our patients are to be served.

Perhaps the Florida Department of Health and Rehabilitative Services could get some pointers from the Florida Department of Commerce.

● Dr. St. Petery, 3975 W. W. Kelly Road, Tallahassee 32301.

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**Discord is the great evil of the human species and toleration is its only remedy. — Voltaire**

SPECIAL ARTICLES

# Atherosclerotic Cardiovascular Disease in Small Town Office Practice

R. Edward Dodge Jr., M.D.

Atherosclerotic cardiovascular disease is preventable. There are major controversies as to the importance of various etiological factors in its genesis but virtually no one disputes that it has flowered in the 20th century under conditions of western civilization.

The disease is almost unknown in most nonindustrialized cultures, at least until the people come under strong western influences. The fact thay they become susceptible provides strong evidence that the disease is primarily, culturally or environmentally induced even though genetic factors play some role. This fact also indicates that Westerners probably can reverse the epidemic if we alter our environment or health practices sufficiently in appropriately defined directions.

In the meantime atherosclerotic cardiovascular disease and related conditions extract a terrific price. Over one half the people die from these diseases. A large percentage of the horrendously high national health bill can be directly attributed to cardiovascular diseases. Patients strive to gain a few more months or years of life after finding their health has been squandered and doctors seek to restore it by means of hugely expensive technology.

Because of the high prevalence of atherosclerotic cardiovascular disease, I analyzed my office practice to determine how many patients had overt evidence of it or who were at substantial risk because of having one or more identifiable high risk factors. My group practice is that of a family physician, and is typically busy. It is probably skewed somewhat toward geriatric distribution simply because there is a large retired population in the area; however, I see sizeable numbers of patients in all age groups.

My method of analysis is simple. As I saw patients over a six-week period beginning February 15, 1978, I reviewed each chart and tallied any evidence of overt disease or of high risk factors. The sample population consisted of 950 consecutive patients. Table 1 shows a breakdown of total patients into adults as one group and adolescents and children as another. Only the adult group was subjected to remaining analysis. Table 2 shows the number and percentage of adult patients in each of the various high risk categories as well as with overt atherosclerotic cardiovascular disease.

**Table 1. — Office Patients Evaluated.**

| | | |
|---|---|---|
| Consecutive Patients Seen | | 950 |
| Teenagers and Children | 99 | |
| Adults | 851 | |

**Table 2. — Adult Patients with Risk Factors and Evidence of Disease.**

| | Number | Percent |
|---|---|---|
| Total Adults Seen | 851 | 100 |
| Overt Evidence of Disease | 278 | 32.7 |
| Diabetes | 117 | 13.9 |
| Cholesterol Over 250 mg/100 ml | 134 | 15.7 |
| Smoking | 143 | 16.8 |
| Overweight (20% or more) | 264 | 31.1 |
| Hypertension | 310 | 36.4 |
| Free of All Risk Factors and of Overt Disease | 169 | 19.9 |

The number and percentage of patients in various high risk categories is more than total adults seen because many patients fall into more than one category.

## Discussion

The figures in the tables cannot be applied to the entire American society. Obviously any patient population profile such as this is skewed toward disease and away from health simply because healthy adults are less likely to be found in doctors' offices. Nevertheless the figures are sobering for, even after allowing for bias, it is apparent that large numbers of adult Americans have one or more significant risk factors for atherosclerotic cardiovascular disease. Furthermore, for many Americans, some factors are self-imposed. Smoking is one. Diabetes, hypercholesterolemia, obesity, and hypertension have some degree of genetic determination or predisposition, but dietary influences also play a significant role. In short, health practices (of perhaps I should say health malpractices) by patients themselves are responsible for a large amount of disease any by extension for a large amount of the cost of medical care in America. Clearly, it is as important for the family physician to teach his patients to avoid or discard poor health practices as to heal them after they become overtly ill.

Unfortunately many people including physicians develop an attitude that long-range preventive efforts regarding atherosclerotic cardiovascular disease are virtually hopeless. Admittedly, it is not easy to persuade patients to change basic health habits; however, it is not impossible. One pleasant surprise while carrying out this survey of my patients was to learn how many had stopped smoking in the preceding two or three years. It was a surprise because I had no idea that our constant health education efforts were having such an impact.

## Summary

If my practice is typical, about 80% of our adult patients are subject to overt atherosclerotic cardiovascular disease or to one or more significant risk factors. Poor health practices by patients are a major contributing factor to this disease. The task of preventing it is formidable but not hopeless.

• Dr. Dodge, 511 West Highland Boulevard, Inverness 32650.

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# Annual Sequential Review Course for Family Physicians and/or Primary Care Physicians

Frederick Firestone, M.D., Charles E. Aucremann, M.D.
Ronald G. Blankenbaker, M.D.

**Abstract: In 1977 a sequential review course was given for practicing family physicians and other primary care physicians at three central Florida locations. In 1978 the number of locations was increased to five (Tampa, St. Petersburg, Orlando, Daytona Beach and Fort Myers), and this became the first year of a six-year cyclic core curriculum modified from "six-year cyclic core program" of the Minnesota Academy of Family Physicians. In 1978 the course was attended by approximately 200 physicians from central Florida. Each physician received up to 42 CME Category I AAFP prescribed credit hours. The format included a faculty presentation, case management problem discussions and quiz evaluations. Subjects covered included all fields of medicine and surgery, although special emphasis was placed on acquainting participants with new diagnostic procedures and therapeutics.**

## Background

It has been estimated that approximately 75% of the practicing physician's total medical knowledge is acquired after completion of formal undergraduate and graduate training. Therefore, CME is assuming a more important role in the life of the family physician and he is recognizing the value of regular, formal study. The number of CME programs and the number of participating physicians is steadily increasing. However, continuing medical education for practicing family physicians is all too often sporadic or fragmented. Physicians receive some instruction at medical meetings (local, state or national medical associations), hospital meetings (frequently specialty oriented) and medical seminars. These continuing medical education courses are frequently expensive, poorly organized, catered to a physician's interest rather than needs, and associated with poor retention of practical or useful information. The atmosphere of many holiday seminars is nonacademic and they may be poorly attended when they interfere with sightseeing or sports activities. Most physicians are overly busy during the work week, too tired to benefit from evening programs and their busy schedule may prevent them from attending weekly CME conferences at the local level. For these reasons, the programs discussed herein were all held on Saturday and Sunday mornings to allow for a more relaxed indepth discussion of the subjects presented and organized for the convenience of and minimum expense to the physician.

To overcome some of the obstacles previously mentioned and to offer all practicing family physicians and primary care physicians a continuing, comprehensive educational program, a sequential review course was conceived.

## Program Structure

The locations at which this review course was given included USF College of Medicine, Tampa; Bayfront Medical Center, St. Petersburg; Florida Hospital, Orlando; Halifax Hospital Medical Center, Daytona Beach, and Lee Memorial Hospital, Fort Myers.

The time was either Saturday or Sunday, 9:00 a.m. - 12:30 p.m. every week with exception of Fort Myers where the course was given every second Saturday from 9:00 a.m. - 12:30 p.m. A total of 12 sessions were presented.

The scheduling of the sequential presentation allowed a participating physician who missed a session in

From the Department of Family Medicine, University of South Florida College of Medicine, Tampa.

one location to attend it the next week in another location. One physician who lived 300 miles north of the College of Medicine was able to attend all four seminars of one month by taking two weekends off and going to both Saturday and Sunday sessions at two locations for one weekend.

Tables 1, 2 and 3 demonstrate how this sequential element was used to give the same presentation at four specific locations at different times. The Fort Myers program was given every second Saturday. As much as possible the same instructor presented the subject at separate facilities.

## CME Credit

Approval was obtained for 42 hours of Category I American Medical Association credit or 42 hours prescribed American Academy of Family Physicians credit. The cost to the physician was maintained at slightly over $5 per credit hour.

## Format

Registration and signing-in took place between 8:45 a.m. and 9:00 a.m. The first lecture was given at 9:00 a.m. with appropriate audiovisual support. At 10:15 a.m. there was a ten minute break for coffee and danish. At 10:30 a.m. the second lecture followed. At 11:45 a.m. prepared case management problems were presented and discussed by the physicians attending the course. These problem discussions were moderated by faculty from the Department of Family Medicine and included the speaker or consultants. A pre-course quiz (closed book) was given prior to the course and a shorter post-course quiz was given after the course was finished.

## Topic Selection

To design the most useful curriculum for the course, the faculty committee of the Department of Family Medicine reviewed a variety of source material.[1,9] This included published editorials and papers on the core content of family practice, surveys of desired and needed topics from local family practice groups, medical audit experiences in the involved hospitals and the personal experience of the program director in presenting similar programs while on the faculty of another medical school.

The 1978 course was patterned after the first year of the Minnesota Academy of Family Physicians six-year cyclic core. The subjects covered in 1977 were as follows: infectious diseases and antibiotics, pulmonary diseases and respiratory therapy, hypertension, cardiology, dermatology, liver diseases, allergy, immunology, connective tissue disorders, office gynecology, pediatrics, endocrinology, orthopedics and minor surgery, oncology, psychiatry and human sexuality. In 1978 the additional subjects covered were: neurology, gastrointestinal diseases, electrocardiogram interpretation, pediatric cardiology, hematology, nephrology, pediatric endocrinology, behavioral problems, emergency care, acute abdomen, ears-nose-throat, ophthalmology, physical medicine and rehabilitation, gynecology, obstetrics, and radiology.

## Speaker Selection

Speakers were selected from the faculty of the University of South Florida College of Medicine. Subject matter was discussed in detail with prospective speakers. The importance of practical application and an approach to the subject from the point of the family physician was stressed. The programs were moderated by faculty members of the Department of Family Medicine who guided discussions and presentations toward practical family medicine. This provided more meaningful information for use by the participants and avoided an unduly academic emphasis.

## Evaluation

A questionnaire was prepared to allow both the participating physicians and faculty to evaluate the program. The evaluation questionnaire also asked the attending physician to grade the lectures and material presented. The five grades used were from very poor (#1) to very good (#5). The questionnaire also requested responses as to location, time, general comments and suggestions of subjects not covered in the program. Approximately 50% of the attending physicians responded.

Positive and generally complimentary comments included such statements as: "Imperative for preparation for ABFP exam," "Will most certainly take it again if offered," "This is exactly what I needed" (from a rural physician), "Excellent, particularly appreciate case management problems," etc. Some of the constructive comments concerned subjects not included, earlier mailing of case material, possibility of a correspondence course, sale of tape of lectures, more case management problems and restricting the morning session to one subject. Negative comments included interruption of speakers from the floor, running late, cutting lectures short to accommodate quiz, etc.

The evaluation by number showed that only 10% graded the course as poor, while 90% graded it above average with the greatest percentage grading it good or very good.

## TABLE 1

### 1ST BLOCK ROTATION: SEQUENTIAL FAMILY PRACTICE REVIEW

| | Tampa<br>Univ. of South Florida<br>College of Medicine<br>Room 1097 | St. Pete<br>Bayfront Medical Center | Orlando<br>Florida Hospital | Daytona Beach<br>Halifax Hospital<br>Medical Center |
|---|---|---|---|---|
| | Saturdays 9:00 a.m. | Sundays 9:00 a.m. | Sundays 9:00 a.m. | Saturdays 9:00 a.m. |
| Neurology | 4/1/78 | 4/9/78 | 4/16/78 | 4/22/78 |
| G. I. Disease | 4/8/78 | 4/16/78 | 4/23/78 | 4/1/78 |
| EKG Interpretation<br>Pediatric Cardiology | 4/15/78 | 4/23/78 | 4/2/78 | 4/8/78 |
| Hematology<br>Nephrology | 4/22/78 | 4/2/78 | 4/9/78 | 4/15/78 |

## TABLE 2

### 2ND BLOCK ROTATION: SEQUENTIAL FAMILY PRACTICE REVIEW

| | Tampa<br>Univ. of South Florida<br>College of Medicine<br>Room 1097 | St. Pete<br>Bayfront Medical Center | Orlando<br>Florida Hospital | Daytona Beach<br>Halifax Hospital<br>Medical Center |
|---|---|---|---|---|
| | Saturdays 9:00 a.m. | Sundays 9:00 a.m. | Sundays 9:00 a.m. | Saturdays 9:00 a.m. |
| Pediatric Endocrinology<br>Behavioral Problems | 4/29/78 | 5/7/78 | 5/14/78 | 5/20/78 |
| Emergency Care | 5/6/78 | 5/14/78 | 5/21/78 | 4/29/78 |
| Acute Abdomen | 5/13/78 | 5/21/78 | 4/30/78 | 5/6/78 |
| ENT | 5/20/78 | 4/30/78 | 5/7/78 | 5/13/78 |

## TABLE 3

### 3RD BLOCK ROTATION: SEQUENTIAL FAMILY PRACTICE REVIEW

| | Tampa<br>Univ. of South Florida<br>College of Medicine<br>Room 1097 | St. Pete<br>Bayfront Medical Center | Orlando<br>Florida Hospital | Daytona Beach<br>Halifax Hospital<br>Medical Center |
|---|---|---|---|---|
| | Saturdays 9:00 a.m. | Sundays 9:00 a.m. | Sundays 9:00 a.m. | Saturdays 9:00 a.m. |
| Ophthalmology | 6/3/78 | 6/11/78 | 6/18/78 | 6/24/78 |
| Orthopedics<br>PMR | 6/10/78 | 6/18/78 | 6/25/78 | 6/3/78 |
| Gynecology | 6/17/78 | 6/25/78 | 6/4/78 | 6/10/78 |
| Obstetrics<br>Radiology | 6/24/78 | 6/4/78 | 6/11/78 | 6/17/78 |

## Comments

In order to benefit the family physician, CME must cover all fields in family medicine and must be "continuing." It has to be so structured as to enable the physician to use the material covered in his daily practice. By making the course sequential, the participating physician (who is issued an I.D. card) can attend the same sessions at different times at any of the five locations, and therefore assure himself that his schedule can fit into his activity regarding "on call" and vacation. This was very well received by the practicing physicians.

It is extremely difficult to determine whether a CME program has changed the habits of the practicing physician for the better. Various methods have been explored to evaluate the impact of CME in actual practice. Direct questions are generally unsatisfactory, a formal program of self assessment is effective only in a small group and in continuing relationships. A benefit of an organized curriculum over several years may be the possibility of using the quiz to identify basic changes in practice patterns. Such relationships have been reflected in reported audits in a hospital staff where audits are used as a basis for CME programs. There are many factors relating to reasons why the physician does not change his practice behavior when he acquires new knowledge. These include old bad habits, inadequate effort and/or a lack of critical thought, etc. The challenge to organized CME is to overcome these factors by stimulating physicians to a greater interest in the physiological basis for their practice decisions.

The patient profile portion of the American Board of Family Physicians recertification examination suggests a possible modality of long range CME evaluation. A series of simplified patient management descriptions to be completed each year by the physicians attending the series is under consideration as one method of stimulating self assessment and objective review of the effect of the program. Current plans call for continuing this sequential program with gradual expansion to an ongoing series with a curriculum organized for a six-year period.

## Conclusion

The sequential CME series presented by the Department of Family Medicine, University of South Florida has demonstrated the feasibility and excellent acceptance of this course format by the medical community. The flexibility provided by repeating the same program at different times in different but not distant locations allowed a much wider participation and better continuity for the attending physicians.

Expanding this series to a six-year cyclic core curriculum allows for the development of innovative methods of evaluation for long range practice impact as well as immediate cognitive enrichment.

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• Dr. Firestone, 12901 N. 30th St., Tampa 33612.


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**Leaders have two important characteristics; first, they are going somewhere; second, they are able to persuade other people to go with them.**

## Commencement Address

# A Democratic Education — An Excercise In Collegiality

***(A possible view of Diogenes were he to examine our present educational process)***

**E. M. Papper, M.D.**

Mr. President, members of the Board of Trustees, families and friends, spouses, and children — and especially members of the Class of 1979, I congratulate our new physicians for their diligence, ability, and compassion on this important day. As they have done, I also pay tribute to their parents, and their wives and husbands who helped so much — and to the children whose view of parenting will necessarily be different from other children. I wish to ask you to imagine a visit by Diogenes — the lampholder looking for an honest man — to our Medical School — or any medical school in the Nation.

There is little disagreement that one must provide a mixture of democracy as well as information in the education process. As Diogenes might have stated it; because it was always his habit to side with his opponents; we must support the premise of a mix of democracy and information transfer because it is a matter of principle. There is another reason for this approach and that is the adoption of the philosophy of Fontenell on the subject of differentiating right from wrong. Whenever Fontenell became bored with a discussion, he would leave the room declaring that after all everything is indeed possible and that everybody may be right. This attitude enabled the distinguished philosopher to maintain his serenity and keep his stomach free of ulcers. He also lived for well over one hundred years and in health good enough to bury his contemporaries — both friends and enemies. The assertion of this attitude toward education is not especially flattering, yet one can say that it has something of an aura of validity. The message logically pursued is in fact that to democratize education, one must make it easier. If we can accept this approach as constructive thinking, then we have a viable method of thought.

It is obvious that the difficulties of today's medical education cause a schism between the supporters of the System — for example the eager, intelligent students — and other factions. It is no less obvious that these differences are non-productive. It is necessary, therefore, to search out and eradicate the cause of the quarrel. The reason for the dispute has been identified by some as "Difficulty." For instance, students are expected to be reasonably competent in basic science — the language of biomedical disciplines as well as the ultimate language of clinical care. It is suggested to students, also, that there is a joy of learning and with it an obligation to work hard on that process. A distinguished faculty should be competent in the Bible and Shakespeare, as well as in the subjects they teach and also the Faculty Manual — our constitution of governance and collegial behavior. The members of the administration contribute in a marked way to the difficulties described by expecting that the core curriculum of education should logically lead to the ability to learn clinical science and, therefore, to care for patients. This attitude does not seem unreasonable, although it is sometimes questioned by both students and faculty.

A logical development of the newer approaches to medical education as Diogenes might see it, would suggest that students be compassionate and pleasant and that the admissions process seek out these characteristics in the applicants. The faculty must not be permitted to be overworked and great respect must be paid to the need for self-study and self-improvement by all.

In the final analysis there is only one valid reform of the curriculum, and that is to do away with it. Everything could be except examinations.

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Dr. Papper is Vice President for Medical Affairs and Dean, University of Miami School of Medicine, Miami.

This Commencement Address was delivered on June 3, 1979 before the 24th graduating class of the University of Miami School of Medicine.

Another needed reform according to the 20th Century Diogenes, is to forbid any kind of encounter between faculty and students. Management by administation should, of course, be eliminated. There may develop a clandestine need for students to feel that they must learn despite all handicaps now placed in their path. The faculty might decide to teach even if an illegal way must be found to make it happen. The administration horrified by the threat of a sentence to commit the Faculty Manual to memory, might decide to try to make it possible for students and faculty to learn in an atmosphere that has little tinge of the pedantic.

I suppose by this time many of you are expecting a siren to ring and Dr. Sussex and his psychiatric netmen to come and forcibly remove me from this platform for sounding the alarm in the manner of Jonathan Swift. These remarks are harmless. In the manner of Mark Twain I only intend by exaggeration to suggest the truth as I see it. In the light of so many experiences and so many conflicts of opinion about medical education, it has become increasingly clear that few experiences are as educational as finding that one's ideas must be made concrete lest they become ephemeral and be as words writ upon the sand.

I have been most impressed with trying to deal with those factors that give us our greatest problems in assisting students become professionally competent physicians. They are subject to many opinions but Dr. George Engel of the University of Rochester summarized them as well as anyone I know.

1. In most medical schools, he said, the education of the medical student no longer enjoys the highest priority. This is true despite all the examination and revamping of undergraduate medical curricula now in process. All of these changes have, when they are not fundamental, been termed tinkering by our own Dr. Jason and tinkering always results in nothing but the aimless spinning of wheels and consumption of time.
2. Preclinical departments have become major university centers for graduate education and research. All of this is a boon and aid for the advancement of biomedical reasearch and the development of biomedical scientists. However, this particular development, since these members of the faculty are understandably involved in their own kinds of biomedical research, no longer, as Engel sees it, provides the optimal conditions for the education of the medical student. Their interests tend to be otherwise. To the extent that this kind of faculty skill can be harnessed for medical education, there is great hope for improvement. To the extent that it remains fragmented and as young people might have said irrelevant, it will be a remaining problem.
3. There is a proliferation of clinical specialties with external examining boards which control the standards. The increased orientation and perhaps even loyalty by our faculties to their own disciplines have led to fragmentation of effort and the satisfaction of accrediting bodies which really determine the pattern of the educational process. The rigidity of the administrative structure and its inability to cope with these elements in the overregulated society has also been a detriment to medical student education. Many members of of the faculty, especially those who do research have become so specialized in their knowledge and experience that they may not feel comfortable to teach elementary clinical facts or basic scientific concepts.
4. The basic organization and philosophy of medical education, in my opinion, unfortunately, also tends to ignore the patient to an alarming degree. Education is oriented toward disease, which is an abstraction and hardly at all toward understanding the problems of the patient who is regarded sometimes as a convenient vehicle to demonstrate the characteristics of disease. Clinical teaching exercises often take place far away from the bedside or the operating room and occasionally the patient isn't even seen by the instructor. Few instructors seem to be interested in teaching the basic methods of clinical observation and it is uncommon for many students to have supervision of skills in clinical data collecting, as the student progresses through clinical assignments. With this attitude on the part of teachers, it is not surprising that some students come to think that information derived from patients is of little value and that patients are rather incidental contributions to their education. This point of view is a serious deficiency in educational programs nationally and tends to develop deficiencies in medical care including the making of inappropriate medical diagnoses and providing improper treatment because all of us do not sufficiently respect our patients as our teachers.

Among other deficiences, physicians are uncomfortable in dealing with the emotional problems of their patients and their patients' illnesses.

Is it all hopeless? Of course not! It seemed necessary to tell the Class of 1979 that their problems are not uncommon. They are national in scope and it is our pledge in the University of Miami School of Medicine to

keep working to attempt to do something about it. The faculty need to be less rigid, more open, and more dedicated to the notion that teaching is well nigh an impossible assignment but that guidance of students toward learning is not only possible, but necessary, and very rewarding to those who practice this kind of interaction. The faculty, furthermore, must develop a renewed dedication to their primary task, which is the education of medical students, and to do this without in any way sacrificing their other missions of strong intellectual research and the various kinds of service to the public. This especially includes, in the clinical areas, the care of patients and the prevention of illness and disease, and in the non-clinical areas the providing of appropriate service to the various constituents they serve. The administration of a school of medicine must view itself as the servant and not the master of its student body and its faculty. It is not unusual that those who wish to serve often to have their motivation misinterpreted. It should be concluded that service also does include the opportunity to suggest different dimensions of change and leadership in the process of change. The notion that a university can serve as a change agent is a difficult one for many faculty to accept since most of them are in accord with Robert Goheen, former president of Princeton, who said, "Let us recognize clearly the cardinal function of the university is to be a center for study and for thought and a place where searching inquiry and sober reflection are the order of the day. For that to be the case, a considerable degree of detachment — which is a very different thing from indifference — must be possible for faculty and students." Dr. Goheen's sentiments are accurate even for schools of medicine, when they deal with school of medicine as a graduate part of the university. However, it is necessary to recognize that medical schools are also professional schools and this quality carries with it a special obligation that differs from the obligation of other graduate schools in the university. I am firmly committed to the idea that a professional school must have deep meaningful roots in the society that it serves and must recognize its responsibilities to deal directly with some of society's immediate problems, if its professional training — in contrast to graduate education — is to have appropriate relevance. I think there is no question that many of us have failed to understand the multiple roles of research crucial to a graduate school in the university — and a medical school is one — as well as the role of education of its medical students for their responsibility to society, and the role of the faculty of a medical school in its service to society, whether it is patient care, applied research or technology. It is time that those of us with a will to achieve these objectives must move more briskly upon them and be undaunted by the bureaucracies both internal and external which inhibit change.

I would like to hope that your experience at the University of Miami School of Medicine as it has evolved over your entire learning experience might reflect these goals; i.e., professionalism and wisdom.

I hope and pray for you that the wisdom and knowledge that you have acquired, you will view only as the beginning of a continuum which is never ending where learning goes on forever and this implies the enlargement of knowledge as well as the rectification of mistakes. The distinguished physician, Maimonides, whose oath you are taking today also said: "Preserve the strength of my body and soul so that they may ever be ready to help rich and poor, good and bad, enemy and friend." Fortunate you will be if you have only friends. That is unlikely. It seems to be important that you recognize your obligation to be helpful to those who may not be friends, but who deserve, because they are fellow human beings, the skills available to you whether as physician or as people, or as members of the human family.

I also hope, in closing, that you will find ways to repute the thought of Jonathan Swift who said, "Happiness is a perpetual condition of being well deceived."

All the best to you — and the love of God and man go with you.

---

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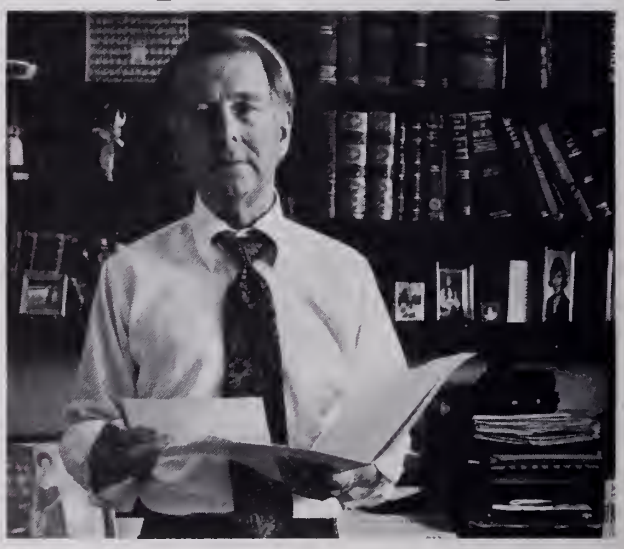

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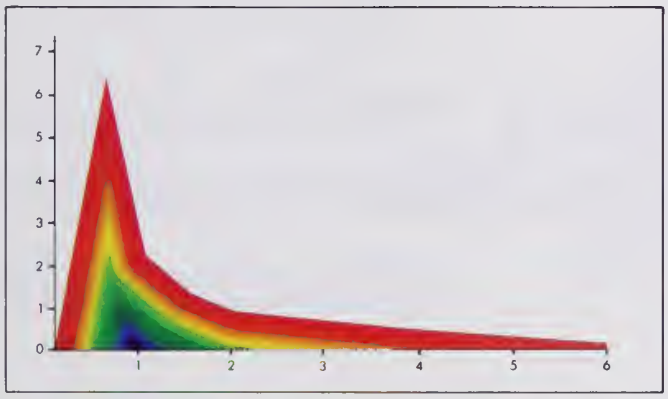


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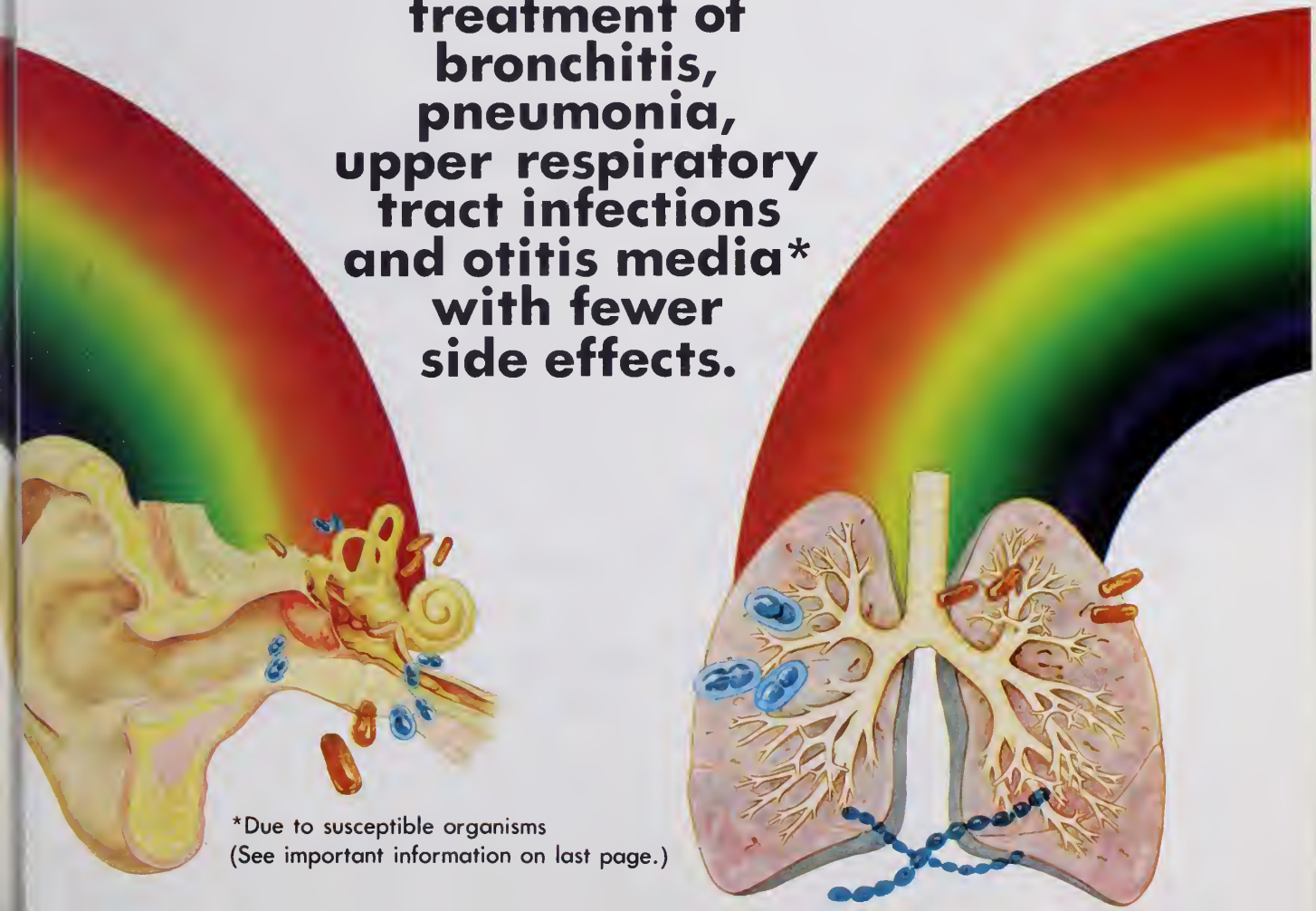

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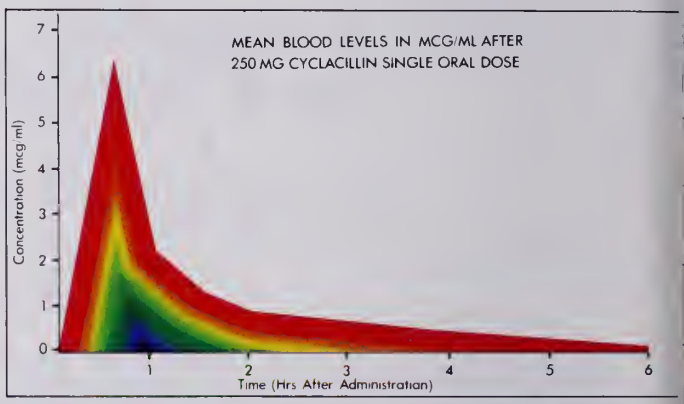


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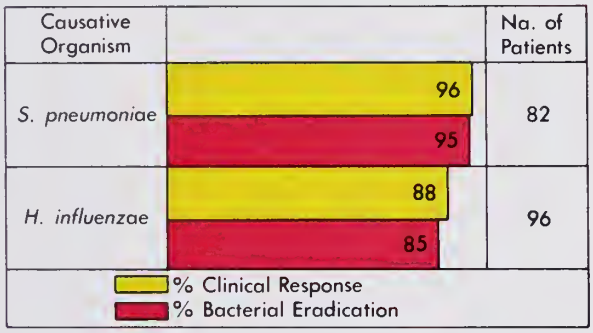



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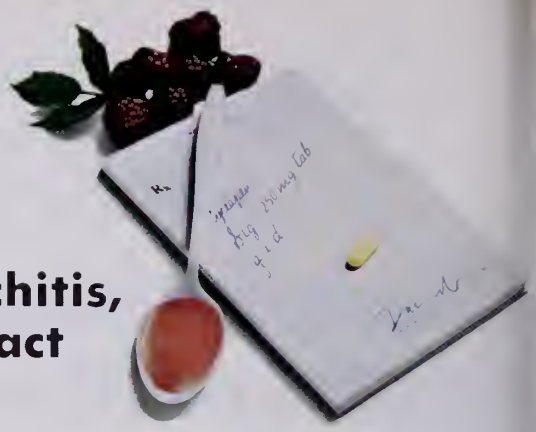
(ee important information on next page)

New from Wyeth Laboratories

# CYCLAPEN®

## (cyclacillin) Tablets/ Suspension



## more than just spectrum in bronchitis, pneumonia, upper respiratory tract infections and otitis media*

- Rapid, virtually complete absorption from GI tract
- Rapid onset of action—mean peak serum levels within 30 minutes
- Exceptionally high peak blood levels—3 times greater than ampicillin (clinical efficacy may not always correlate with blood levels)
- Rapidly excreted unchanged in the urine—1½ times faster than ampicillin
- Significantly fewer episodes of diarrhea and skin rash than reported with ampicillin in studies to date
- Excellent clinical response and outstanding bacterial eradication documented in double-blind studies involving 2,581 patients
- New CYCLAPEN® Suspension—great-tasting raspberry punch flavor

*Due to susceptible organisms.

### How Supplied

CYCLAPEN® (cyclacillin) tablets:
250 mg scored tablets
500 mg scored tablets

CYCLAPEN® (cyclacillin) for oral suspension
125 mg per 5 ml:
100 ml and 200 ml bottles
250 mg per 5 ml:
100 ml and 200 ml bottles

**Indications**

*Cyclapen® (cyclacillin) has less in vitro activity than other drugs in the ampicillin class of antibiotics and its use should be confined to the indications listed below*

Cyclapen® is indicated for the treatment of the following infections

RESPIRATORY TRACT

Tonsillitis and pharyngitis caused by Group A beta-hemolytic streptococci

Bronchitis and pneumonia caused by *S. pneumoniae* (formerly *D. pneumoniae*)

Otitis Media caused by *S. pneumoniae* (formerly *D. pneumoniae*) and *H. influenzae*

Acute exacerbation of chronic bronchitis caused by *H. influenzae**

*Though clinical improvement has been shown, bacteriologic cures cannot be expected in all patients with chronic respiratory disease due to *H. influenzae*

SKIN AND SKIN STRUCTURES (integumentary) infections caused by Group A beta-hemolytic streptococci and staphylococci, non-penicillinase producers

URINARY TRACT INFECTIONS caused by *E. coli* and *P. mirabilis* (This drug should not be used in any infections caused by *E. coli* and *P. mirabilis* other than urinary tract infections.)

NOTE: Cultures and susceptibility tests should be performed initially and during treatment to monitor the effectiveness of therapy and the susceptibility of bacteria. Therapy may be instituted prior to the results of sensitivity testing.

**Contraindications**

The use of this drug is contraindicated in individuals with a history of an allergic reaction to penicillins.

**Warnings**

CYCLACILLIN SHOULD ONLY BE PRESCRIBED FOR THE INDICATIONS LISTED IN THIS INSERT.

CYCLACILLIN HAS LESS *IN VITRO* ACTIVITY THAN OTHER DRUGS OF THE AMPICILLIN CLASS ANTIBIOTICS. HOWEVER, CLINICAL TRIALS HAVE DEMONSTRATED THAT IT IS EFFICACIOUS FOR THE RECOMMENDED INDICATIONS.

SERIOUS AND OCCASIONAL FATAL HYPERSENSITIVITY (ANAPHYLACTOID) REACTIONS HAVE BEEN REPORTED IN PATIENTS RECEIVING PENICILLIN.

ALTHOUGH ANAPHYLAXIS IS MORE FREQUENT FOLLOWING PARENTERAL ADMINISTRATION, IT HAS OCCURRED IN PATIENTS ON ORAL PENICILLINS. THESE REACTIONS ARE MORE APT TO OCCUR IN INDIVIDUALS WITH A HISTORY OF SENSITIVITY TO MULTIPLE ALLERGENS. THERE ARE REPORTS OF PATIENTS WITH A HISTORY OF PENICILLIN HYPERSENSITIVITY REACTIONS WHO EXPERIENCED SEVERE HYPERSENSITIVITY REACTIONS WHEN TREATED WITH A CEPHALOSPORIN. BEFORE THERAPY WITH A PENICILLIN, CAREFUL INQUIRY SHOULD BE MADE ABOUT PREVIOUS HYPERSENSITIVITY REACTIONS TO PENICILLINS, CEPHALOSPORINS, AND OTHER ALLERGENS. IF AN ALLERGIC REACTION OCCURS, THE DRUG SHOULD BE DISCONTINUED AND APPROPRIATE THERAPY SHOULD BE INITIATED. SERIOUS ANAPHYLACTOID REACTIONS REQUIRE IMMEDIATE EMERGENCY TREATMENT WITH EPINEPHRINE, OXYGEN, INTRAVENOUS STEROIDS, AIRWAY MANAGEMENT, INCLUDING INTUBATION, SHOULD ALSO BE ADMINISTERED AS INDICATED.

**Precautions**

Prolonged use of antibiotics may promote the overgrowth of nonsusceptible organisms. If superinfection occurs during therapy, appropriate measures should be taken.

PREGNANCY: Pregnancy Category B. Reproduction studies have been performed in mice and rats at doses up to ten times the human dose and have revealed no evidence of impaired fertility or harm to the fetus due to cyclacillin. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

NURSING MOTHERS: It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when cyclacillin is administered to a nursing woman.

**Adverse Reactions**

The oral administration of cyclacillin is generally well tolerated.

As with other penicillins, untoward reactions of the sensitivity phenomena are likely to occur, particularly in individuals who have previously demonstrated hypersensitivity to penicillins or in those with a history of allergy, asthma, hay fever, or urticaria.

The following adverse reactions have been reported with the use of cyclacillin: diarrhea (in approximately 1 out of 20 patients treated), nausea and vomiting (in approximately 1 in 50), and skin rash (in approximately 1 in 60). Isolated instances of headache, dizziness, abdominal pain, vaginitis, and urticaria have been reported. (See WARNINGS)

Other less frequent adverse reactions which may occur and that have been reported during therapy with other penicillins are: anemia, thrombocytopenia, thrombocytopenic purpura, leukopenia, neutropenia and eosinophilia. These reactions are usually reversible on discontinuation of therapy.

As with other semisynthetic penicillins, SGOT elevations have been reported.

**Dosage and Administration**

| INFECTION* | ADULTS | CHILDREN |
|---|---|---|
| | | Dosage should not result in a dose higher than that for adults. |
| *Respiratory Tract* | | |
| Tonsillitis & Pharyngitis** | 250 mg q.i.d. in equally spaced doses | body weight <20 kg (44 lbs) 125 mg q.i.d. in equally spaced doses<br>body weight >20 kg (44 lbs) 250 mg q.i.d. in equally spaced doses |
| Bronchitis and Pneumonia | | |
| Mild or Moderate Infections | 250 mg q.i.d. in equally spaced doses | 50 mg/kg/day q.i.d. in equally spaced doses |
| Chronic Infections | 500 mg q.i.d. in equally spaced doses | 100 mg/kg/day q.i.d. in equally spaced doses |
| *Otitis Media* | 250 mg to 500 mg q.i.d. in equally spaced doses depending on severity | 50 to 100 mg/kg/day in equally spaced doses depending on severity |
| *Skin & Skin Structures* | 250 mg to 500 mg q.i.d. in equally spaced doses depending on severity | 50 to 100 mg/kg/day in equally spaced doses depending on severity |
| *Urinary Tract* | 500 mg q.i.d. in equally spaced doses | 100 mg/kg/day in equally spaced doses. |

*As with antibiotic therapy generally, treatment should be continued for a minimum of 48 to 72 hours after the patient becomes asymptomatic or until evidence of bacterial eradication has been obtained.

**In infections caused by Group A beta-hemolytic streptococci, a minimum of 10 days of treatment is recommended to guard against the risk of rheumatic fever or glomerulonephritis.

In the treatment of chronic urinary tract infection, frequent bacteriologic and clinical appraisal is necessary during therapy and may be required for several months afterwards.

Persistent infection may require treatment for several weeks.

Cyclacillin is not indicated in children under 2 months of age.

*Patients with Renal Failure*

Based on a dosage of 500 mg q.i.d., the following adjustment in dosage interval is recommended:

Patients with a creatinine clearance of >50 ml/min need no dosage interval adjustment.

Patients with a creatinine clearance of 30-50 ml/min should receive full doses every 12 hours.

Patients with a creatinine clearance of between 15-30 ml/min should receive full doses every 18 hours.

Patients with a creatinine clearance of between 10-15 ml/min should receive full doses every 24 hours.

In patients with a creatinine clearance of <10 ml/min or serum creatinine values of ≥10 mg%, serum cyclacillin levels are recommended to determine both subsequent dosage and frequency.

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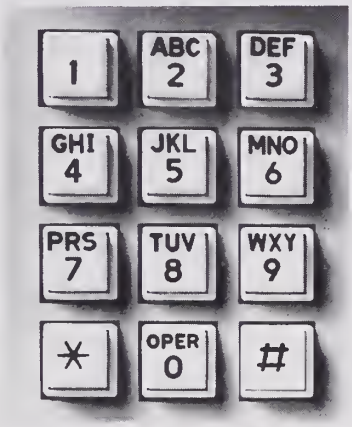


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# ORGANIZATION

# FMA CME Program Procedures for Appeal and Suspension

**(Editor's Note: In May 1979, the FMA House of Delegates adopted "Florida Medical Association, Inc., Continuing Medical Education Program Procedures for Appeal and Suspension." The procedures are reprinted here at the request of the FMA Committee on Continuing Medical Education).**

All members of the Florida Medical Association who are involved with patient care directly or indirectly are expected to participate in the Association's continuing medical education program unless specifically exempted therefrom by the FMA Committee on Continuing Medical Education.

Each member must accumulate a minimum of 150 hours of approved continuing medical education every three years in periods beginning on January 1 of the first year and ending on December 31 of the third year. Requirements may be met in either of four ways approved by FMA (i.e., hour-for-hour reporting using FMA Form PF-142; meeting the educational requirements for membership in the American Academy of Family Physicians; presenting a valid American Medical Association Physician's Recognition Award (PRA); or becoming certified or recertified by a recognized American specialty board).

By January 31 of the year following completion of each three-year cycle, FMA members must file an FMA Form PF-142 with their county medical societies indicating they have met the CME requirements in any of the four accepted ways.

By March 1 of each year each county medical society will notify the Florida Medical Association Committee on Continuing Medical Education of the names of all physician members who are found to be in compliance with the CME requirements for the preceding three-year cycle. County medical societies also by March 1 will advise FMA of the names of those members found to be delinquent in the CME requirements.

Simultaneously, the county medical society will serve notice on each delinquent member by Certified Mail/Restricted Delivery informing him of the society's findings and specifying the following options:

(1) The delinquent member may apply for a one-year "make-up" period by executing an FMA Form MF-197 (Application for Individual Exception to FMA Continuing Medical Education Requirements) and forwarding it to the Florida Medical Association Committee on Continuing Medical Education through his county medical society. However, Form MF-197 must be posted by Certified Mail/Restricted Delivery within 30 days of receipt of his notice of delinquency. Normally, the "make-up" period will be granted, but credits accrued during this additional year will not be accepted as credit for the following reporting period.

(2) If the delinquent member fails or elects not to apply for a one-year "make-up" period, he may be suspended from membership by his county medical society.

If at the end of the three-year cycle plus one make-up year (four years in all) the delinquent member is found to have met the requirements in full, he will be so certified

and his current membership status will continue or appropriately revert from suspension.

If the delinquent member does not present satisfactory evidence that he has met the CME requirements during the preceding four calendar years, the county medical society will serve notice, by Certified Mail/Restricted Delivery, of termination of his membership as of March 15 of the year following. Such notice will be served by the county medical society no later than the preceding February 1.

Notices of suspension or termination of membership for CME delinquency served by county medical societies upon members will state the findings of the county medical society and advise the delinquents of their rights to appeal.

### Appeals

Grounds for appeal from a county medical society suspension or termination of membership action may include: (1) differences between the county medical society and the delinquent regarding the evaluation of his Form PF-142 (Continuing Medical Education Reporting Form); (2) exceptions to county medical society or Florida Medical Association rulings that are adverse to him, including denial of exemption from the program, denial of application for reduction in required hours, etc.; and (3) challenge of membership status. However, once notice of suspension or termination of membership has been served upon the delinquent member, he may not initiate a post facto application for exemption or other exception to the program.

Delinquents must post notice of appeal to their county medical society secretaries by Certified Mail/Restricted Delivery within 30 days of receipt of notice or suspension or termination of membership.

The Secretary will cause to be convened as soon as practical and feasible the county medical society executive committee or its designate to judge and act upon the appeal. The delinquent will be notified by letter posted Certified Mail/Restricted Delivery of the time, date and place of the hearing. This notice will be posted no fewer than 10 days prior to the hearing.

The county medical society executive committee or its designate will notify the delinquent promptly of its findings by letter posted Certified Mail/Restricted Delivery.

In the event of a county medical society ruling adverse to the delinquent member, he may appeal within 10 days of receipt of notification to the Florida Medical Association Committee on Continuing Medical Education. The appeal will be addressed to the Chairman of the Committee on Continuing Medical Education at his place of business or residence and will be posted Certified Mail/Restricted Delivery. The Chairman of the FMA Committee on Continuing Medical Education will arrange a hearing as soon as feasible or practical either by the full Committee or by a subcommittee thereof. All parties, including the delinquent member, will be advised of the time, place and date of hearing by Certified Mail/Restricted Delivery no fewer than 10 days prior.

The Chairman of the Committee on Continuing Medical Education will advise the delinquent and other interested parties of the Committee's determination as soon as possible by means of Certified Mail/Restricted Delivery.

In the event of a Committee decision unfavorable to the delinquent member, he may further appeal to the Board of Governors of the Florida Medical Association using the same procedures within the same time periods as above. Appeals will be addressed to the Secretary of the Florida Medical Association at his place of business or residence.

Appeals to the Board of Governors will be referred to the Florida Medical Association Judicial Council and the Membership and Discipline Subcommittee for the district in which the delinquent member resides. Delinquent member and all other interested parties will be notifed by Certified Mail/Restricted Delivery of time, place and date of the hearing no fewer than 10 days in advance of the hearing date. At this hearing, the delinquent member may be represented by counsel.

At the conclusion of the hearing, the District Membership and Discipline Subcommittee will render a decision and present the case to the Board of Governors at its discretion, depending upon the merits.

There will be no avenue of appeal beyond the Board of Governors.

### Suspension/Termination of Membership

A member in suspension because of CME delinquency will be restored to the full rights of his previous category of membership at such time as he demonstrates that he has purged himself of delinquency by meeting the FMA CME requirements to the satisfaction of his county medical society.

A member whose membership is terminated on account of CME delinquency will not be eligible to reapply to his county medical society for membership for at least 120 days from the offical date of termination.

### Addendum

In the event of any changes in reporting or other procedures in Florida Medical Association's Continuing Medical Education Program, these *Procedures for Appeal and Suspension* will remain in full force and effect unless specifically amended.

# FMA Sponsored Life Insurance Company Announced

The Fidelity Life Insurance Company of Florida, a stock company totally owned by the Florida Physician's Insurance Reciprocal (the principal and largest underwriter of professional liability insurance in Florida) has selected the following Directors:

Vernon B. Astler, M.D., Delray Beach, Chairman; Jack A. MaCris, M.D., St. Petersburg, Vice Chairman; W. Harold Parham, D.H.A., Jacksonville, President; O. William Davenport, M.D., Miami, Secretary; Richard S. Hodes, M.D., Tampa, Treasurer; and Thomas B. Thames, M.D., Orlando.

Pending approval of Florida's Insurance Department, additional details will be made available to the membership and to the public.

The Reciprocal formed the life insurance company:

- to provide quality policies for the public
- as a potential excellent investment
- to take advantage of tax laws allowing consolidated tax returns with the Reciprocal after five years.

The officers were selected at the organizational meeting of the Board as indicated.

Dr. Astler

Dr. MaCris

Dr. Parham

Dr. Davenport

Dr. Hodes

Dr. Thames

# Dr. Sol Klotz of Orlando To Head American College of Allergists

Dr. Klotz

Solomon David Klotz, M.D., of Orlando, will be installed next month as President of the 1,850-member American College of Allergists.

He will take office during the College's 36th Annual Meeting at the Americana Hotel, Bal Harbour, January 19-23.

Widely known in his specialty for many years, Dr. Klotz has made more than 50 contributions to the allergy and immunology literature and was a founding member and two-time President of the Florida Allergy Society. He also is a Past President of the Southeastern Allergy Society and a former Consulting Editor of *The Journal of the Florida Medical Association.*

In the American College of Allergists, Dr. Klotz has held many important positions, including a seat on the Board of Regents, Secretary of the College, and President-Elect.

The new ACA leader is a graduate of New York Medical College, where he earned his M.D. in 1937, and a master's degree in medicine five years later. He later served a medical residency and a medical research fellowship in New York.

Dr. Klotz is a Diplomate of the American Board of Internal Medicine and of the American Board of Allergy and Immunology. His many other professional memberships include several allergy groups.

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# FMA Wins Medicare Disclosure Suit In U.S. District Court

A Federal Judge in Jacksonville has prohibited the U.S. Department of Health, Education and Welfare from making public the names of physicians who received Medicare payments.

U.S. District Judge Charles R. Scott on October 22 ruled in favor of the Florida Medical Association in a suit brought 18 months before by FMA to prevent disclosure of names of physicians receiving Medicare fees and the amount of these fees.

FMA filed suit on March 30, 1978, against the Department of HEW after the agency said it would make the disclosures under the Freedom of Information Act.

Judge Scott held, however, that such disclosure is exempt under the Freedom of Information Act because it would "constitute a clearly unwarranted invasion of personal privacy." Further, the Privacy Act prohibits disclosure without the prior written consent of each individual involved, he continued.

The American Medical Association joined the litigation after FMA filed suit in the U.S. District Court for the Middle District of Florida.

# Three More Annual Meeting Scientific Sections are Announced

Plans have been completed for scientific sections on Otolaryngology, Preventive Medicine and Rheumatology at the 106th Annual Meeting of the Florida Medical Association, according to Calvin W. Martin, M.D., of Arcadia, Annual Meeting Program Chairman.

Programs for sections on Internal Medicine, Chest Medicine, Neonatal-Perinatology, Radiology (I & II), Pathology, Thoracic and Cardiovascular Surgery, Dermatology, Management of Primary Breast Cancer, Allergy and Immunology, Occupational Health, and Physical Medicine and Rehabilitation, were published in the November issue of *The Journal.* Additional programs will be published as they are developed.

The Annual Meeting will be held at the Diplomat Hotel in Hollywood, May 7-11, 1980.

Application will be made to the Medical Education Committee of the Florida Medical Foundation for Category I Credit, Dr. Martin said.

## THURSDAY, AFTERNOON — MAY 8

### SECTION ON RHEUMATOLOGY

(Co-sponsored by Florida Society of Rheumatology and Florida Chapter, Arthritis Foundation)
1:30 p.m. to 4:30 p.m.
Charles B. Kahn, M.D., Hollywood
Program Chairman

**"Non-articular Rheumatism,"** John Calabro, M.D., Director, Division of Rheumatology, St. Vincent Hospital, and Professor of Medicine and Pediatrics, University of Massachusetts Medical School, Worchester, Mass.

**"Current Therapy of Rheumatoid Arthritis,"** (Speaker to be announced)

**"Complement Deficiency and Rheumatic Disease,"** Luis Espinoza, M.D., Associate Professor of Medicine, University of South Florida College of Medicine, Tampa.

## FRIDAY AFTERNOON — MAY 9

### SECTION ON OTOLARYNGOLOGY

(Co-sponsored by Florida Society of Otolaryngology)
1:30 p.m. to 5:30 p.m.
Hueston C. King, M.D., Coral Gables
Program Chairman

**Welcome** — Hueston C. King, M.D., President and Program Chairman, Florida Society of Otolaryngology, Coral Gables.

**"Science and Politics in Otolaryngology,"** Harry McCurdy, M.D., Executive Director, American Council of Otolaryngology.

**"Peritonsillar Abscess Revisited,"** John Isaacs, M.D., Senior Resident, University of Florida College of Medicine, Gainesville.

**"Laser Surgery,"** Brian Mitchell, M.D., Resident, University of Miami School of Medicine, Miami.

**"Neuroesthesioblastoma,"** Pedro Montano-Martinez, M.D., Senior Resident, University of South Florida College of Medicine, Tampa.

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### SECTION ON PREVENTIVE MEDICINE

(Co-sponsored by Florida Society for Preventive Medicine)
2:00 p.m. to 6:00 p.m.
James T. Howell, M.D., Tallahassee
Program Chairman

**"Review of Diabetes Mellitus, Etiology, Diagnosis and Modern Management,"** Jay S. Skyler, M.D., Associate Professor of Medicine and Pediatrics, Diabetes and Endocrinology Unit, University of Miami School of Medicine, Miami.

**"Epidemiological Update — State of Florida,"** Robert A. Gunn, M.D., State Epidemiologist, Tallahassee.

**"Florida's Public Health,"** James T. Howell, M.D., State Health Officer and Staff Director, Health Program Office, Tallahassee.

# Christmas Seals from the past for the future.

When the American Lung Association was founded 75 years ago, TB was a death sentence. Today it can be cured. Thanks to millions of generous Americans and miracles of modern science. But the same technology which provided medicines against TB also created new threats to the lungs. In our workplaces. In products we use daily. In the very air we breathe.

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**WARNING:** Overdosage may cause muscle tremor and convulsions.
**CONTRAINDICATIONS:** Epilepsy or low convulsive threshold.
**CAUTION:** Federal law prohibits dispensing without prescription. Keep out of reach of children.

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# Books Received

**Receipt of the following books is acknowledged. Medical readers interested in reviewing particular books are invited to address requests to the Book Review Editor. Following acceptance of a written review for publication, a reviewer may then retain the book reviewed for his personal or favorite library.**

**The Chemistry of Human Behavior** by Herbert L. Meltzer, Ph.D. 261 Pages. Illustrated. Price $17.95 (cloth). Nelson-Hall Publishers, Chicago, 1979.

**Cry Babel, The Nightmare of Aphasia and a Courageous Woman's Struggle to Rebuild Her Life** by April O. Armstrong. 252 Pages. Price $8.95. Doubleday & Company, New York, 1979.

**Annual Review of Neuroscience** with 31 contributing authors. 555 Pages. Annual Reviews, Inc., Palo Alto, California, 1979.

**Norethindrone, The First Three Decades** edited by Mary Jean Pramik. 100 Pages. Syntex Laboratories, Palo Alto, California, 1978.

**Family Health in an Era of Stress** conducted by Yankelovich, Skelly and White, Inc. 192 Pages (plus packet). General Mills, Inc., Minneapolis, Minnesota, 1979.

**Correlative Neuroanatomy & Functional Neurology, 17th Edition,** by Joseph G. Chusid, M.D. 464 Pages. Illustrated. Price $12.00. Lange Medical Publications, Los Altos, California, 1979.

**Review of Allied Health Education: 3,** Joseph Hamburg, General Editor. 161 Pages. Price $7.50. The University Press of Kentucky, Lexington, Ky., 1979.

**Family Health and Home Nursing,** American National Red Cross. 626 Pages. Illustrated. Price $3.95. Doubleday & Company, Inc., New York, 1979.

**Review of Medical Physiology, 9th Edition,** by William F. Ganong, M.D. 618 Pages. Illustrated. $14.00. Lange Medical Publications, Los Altos, California, 1979.

**Stop Forgetting** by Dr. Bruno Furst. 340 Pages. Price $5.95. Doubleday & Company, Inc., New York, 1979.

**How To Improve Your Child's Behavior Through Diet** by Laura J. Stevens and Rosemary B. Stoner. 346 Pages. Price $9.95. Doubleday & Company, Inc., New York, 1979.

**Child Guidance** by Samuel Kahn, M.D., Ph.D., F.R.S.H. 134 Pages. Price $10.00. Philosophical Library, Inc., New York, 1979.

**Current Surgical Diagnosis and Treatment, Fourth Edition** by J. Englebert Dunphy, M.D., and Lawrence W. Way, M.D. 1162 Pages. Price $19.00. Lange Medical Publications, Los Altos, California, 1979.

**The Vitamin Book** by Rich Wentzler. 224 Pages. Price $4.95. Doubleday & Company, Inc., New York, 1979.

**The Truth About Senility — And How To Avoid It** by Lawrence Galton. 244 Pages. Price $9.95. Thomas Y. Crowell Company, New York, 1979.

**Drug Induced Nutritional Deficiencies** by Daphne A. Roe, M.D. 272 Pages. The Avi Publishing Company, Inc., Westport, Connecticut, 1978.

**Alcohol and the Diet** by Daphne A. Roe, M.D. 229 Pages. The Avi Publishing Company, Inc., Westport, Connecticut, 1979.

**Cooking Creatively for Your Diabetic Child** by Caroline Hastings Babington. 224 Pages. Price $8.95. Doubleday & Company, Inc., New York, 1979.

**Vitamin C Against Cancer** by H. L. Newbold, M.D. 363 Pages. Price $10.95. Stein and Day, New York, 1979.

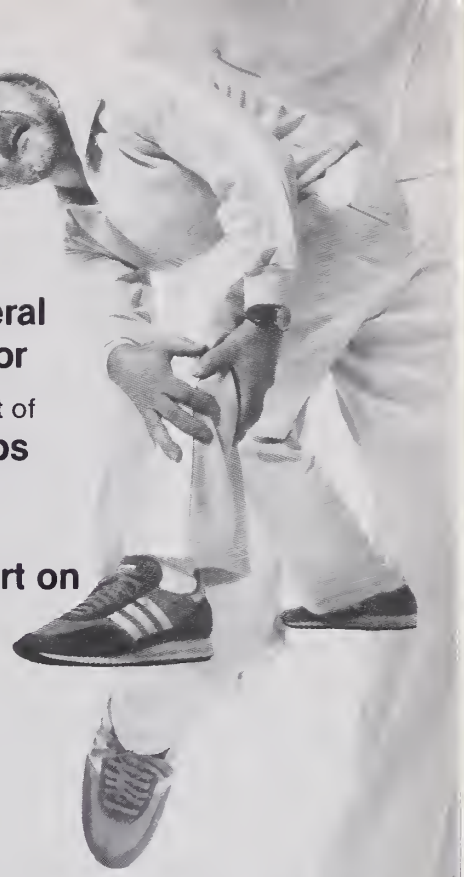
**Applied Therapeutics for Clinical Pharmacists, Second Edition,** Edited by Mary Anne Koda-Kimble, Pharm. D., Brian S. Katcher, Pharm. D., and Lloyd Y. Young, Pharm. D. 944 Pages. Price $31.50. Applied Therapeutics, Inc., San Francisco, 1978.

**Review of Physiological Chemistry** by Harold A. Harper, Ph.D., Victor W. Rodwell, Ph.D., and Peter A. Mayes, Ph.D., D. Sc. 702 Pages. Price $14.50. Lange Medical Publications, Los Altos, California, 1977.

**The Heritage of Aviation Medicine, An Annotated Directory of Early Artifacts,** by Robert J. Benford, M.D. 122 Pages. Illustrated. Price $4.50. Aerospace Medical Association, Washington, D.C., 1979.

**Women Can Wait, The Pleasures of Motherhood After Thirty** by Terri Schultz. 191 Pages. Price $4.95. Doubleday & Company, New York, 1979.

**What You Should Know About Medical Lab Tests** by Bernard Kliman, M.D. and Raymond Vermette, M.S., with Ernest Kolowrat. 207 Pages. Price $9.95. Thomas Y. Crowell Company, New York, N.Y., 1979.

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Riboflavin (B-2) .....2 mg.
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Each yellow tablet contains:
Nicotinic Acid .....250 mg.
Niacinamide .....75 mg.
Ascorbic Acid .....150 mg.
Thiamine HCL (B-1) .....25 mg.
Riboflavin (B-2) .....2 mg.
Pyridoxine HCL (B-6) .....10 mg.
**DOSE:** 1 to 3 tablets daily.
**AVAILABLE:** Bottles of 100, 500.

**LIPO-NICIN®/100 mg.**

Each blue tablet contains:
Nicotinic Acid .....100 mg.
Niacinamide .....75 mg.
Ascorbic Acid .....150 mg.
Thiamine HCL (B-1) .....25 mg.
Riboflavin (B-2) .....2 mg.
Pyridoxine HCL (B-6) .....10 mg.
**DOSE:** 1 to 5 tablets daily.
**AVAILABLE:** Bottles of 100, 500.

**Indications:** For use as a vasodilator in the symptoms of cold feet, leg cramps, dizziness, memory loss or tinnitus when associated with impaired peripheral circulation. Also provides concomitant administration of the listed vitamins. The warm tingling flush which may follow each dose of LIPO-NICIN® 100 mg. or 250 mg. is one of the therapeutic effects that often produce psychological benefits to the patient.

**Side Effects:** Transient flushing and feeling of warmth seldom require discontinuation of the drug. Transient headache, itching and tingling, skin rash, allergies and gastric disturbance may occur.

**Contraindications:** Patients with known idiosyncrasy to nicotinic acid or other components of the drug. Use with caution in pregnant patients and patients with glaucoma, severe diabetes, impaired liver function, peptic ulcers, and arterial bleeding.

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REFER PDI

# Others Are Saying

## Why Are We Killing Clinical Medicine?

James Scott, M.D.

At a recent conference I was listening to a fine presentation of up-to-date tests for detecting thrombophlebitis of the legs. The paper covered recent advances from venography to isotope scanning. But I couldn't help recalling my own experience of both the usefulness and the considerable limitations of these ultramodern methods. Suddenly, it was not hard to find similar examples in my daily work.

Ultramodern methods do not necessarily improve on clinical skill and assessment. Many surgeons would not dare perform a procedure without detailed study of the bleeding-clotting mechanism (cost: $40-$50). In all my years in the practice of surgery, I have never faced any trouble with the bleeding-clotting mechanism that I did not expect on clinical grounds. A reasonably competent history and physical examination give more accurate information than an expensive bleeding-clotting "profile."

In daily practice, few items are more frustrating than functional tests of the thyroid gland. Yet, despite the remarkable clinical symptoms of hyperthyroidism, we are afraid to make judgments without the back-up of sophisticated tests. Every day we order tests of dubious value. Why are we killing clinical medicine?

Clinical judgment is cheap. Tests make profits. And ultramodern tests bring in a lot of profit. If a physician or hospital invests in expensive instruments, the number of tests ordered will rapidly increase. Pressed by competition, hospital administrators scramble for predominance and consumer dollars; they exert pressure on staffs to use the new technology as a sign of loyalty to the institution. The greater the investment, the greater the profit motivation. This is a fact of life.

Many physicians among us love gadgets, whatever technology has to offer. We are fascinated by them, and perhaps we order them without considering the economic consequences.

Defensive medicine forced upon the healing arts by the judicial system is harmful. In case after case, tests, however worthless, carry more weight in court than clinical judgment. Physicians order more worthless tests now than before the malpractice crisis.

But the biggest factor appears to be our educational system. The expansion of technology forces educators to appear ultramodern in their presentations. It sounds backward to spend much time on dull, subjective clinical methods. Academic and peer pressure force young physicians to appear well informed. There is no atrophy of clinical judgment: it never really develops. An ovarian cyst can be diagnosed — and need for surgery established — by a simple pelvic exam. Yet many physicians order several hundred dollars' worth of "blobs and blurs" that add nothing to the already established diagnosis and treatment.

No matter how worthless a test may be, if it is used by enough people it acquires sacred status: usual and customary. We must use it or be held uninformed, incompetent, or guilty of malpractice.

Not that modern technology has not refined our judgment. But perhaps half the tests could be replaced by clinical judgment without affecting the quality of care. Yet, $10 billion to $20 billion is at stake, so the technocrats will contest this claim.

We should reap all the benefits of progress we can. But it is time to realize that we have indulged too much and are squandering our resources. It is time to reassess the value of clinical judgement.

It is time for the pendulum to swing the other way, not only because of economic pressure but because of another lost art — common sense.

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Reprinted from Medical World News, July 23, 1979.

# The School Transfer Dilemma Resolved

A. Dane Sawyer, M.D.

Several months ago I ventilated editorially some of my frustrations concerning the inappropriate responsibility bestowed upon physicians for recommending school transfers for reasons far removed from medical or emotional.

Late this spring a dialogue between the School Health Committee of the PCMA and the Supervisor of Pupil Assignment of the Polk County School Board has put this problem into its proper perspective.

A procedure has been devised which should eliminate, or significantly decrease, physician involvement for transfers that are not for bona fide medical or emotional reasons.

If a pupil's geographic school assignment is felt to be a hardship by his parents, they should go to the school principal of the school which they desire transfer into. At that point a determination should be made as to the nature of the hardship. There are three basic avenues to pursue. The reason(s) may be (1) educational, (2) unusual circumstances or (3) medical or emotional. The parents then are given a "documentation form" in which they submit in writing their reasons for desiring a transfer. If the reasons fall into category (1) or (2) above, they will be reviewed by the school administration and acted upon. If the reason is medical or emotional, it will be referred to the physician for his assessment and action. All it requires is a signature, but further documentation may be an option. If this is necessary a signed release for medical records by the parent should be requested.

This procedure was finalized around June 1, 1979 and is now being circulated to all principals.

I think that there are two key points to this system which should make it successful. The first is proper triage of transfer requests to be reviewed in their appropriate context.

The latter feature is the parental documentation of reason for transfer. This should eliminate a large number of trivial requests. It is essentially a brief history for the physician to review and should save a lot of time.

Connel W. Rodgers, the Pupil Assignment Supervisor of Polk County has been instrumental in developing this procedure. He has consulted frequently with members and Advisors of the Polk County Medical Association School Health Committee in creating this routine. I believe that with the joint cooperation of the school system and the county's physicians that all parties will benefit.

Reprinted from the Polk County Medical Association Bulletin, August 1979.

# Cleft Palate Association Meets in Tampa

**The Annual Meeting of the Florida Cleft Palate Association will be conducted in Tampa, January 26-27, 1980.**

**Speakers from the University of South Florida will include: Mutaz Habal, M.D., Kathleen Toomey, M.D., Pauline Powers, M.D., William Edwards, M.D., Carmelo Sacaceno, M.D., and Jack Maniscalco, M.D.**

**Information may be obtained by contacting Paul Wharton, M.A., 14626 N.W. 36th Avenue, Gainesville 32601.**

# Medical Decision Doctor or School Board Guest Editorial

**Bernard Kimmel, M.D.**

Throughout the history of organized medicine, the hue and cry from doctors has been to keep the lay public out of decisions that are strictly medical judgement in order to keep bias out and allow "pure scientific decisions". Now from within the bastion of the Polk County Medical Association Bulletin and reprinted in the *Journal of the Florida Medical Association* I find the inference that the decision to grant a school transfer based solely on medical need should be left completely to the discretion of a lay Board and the doctor should not be bothered.

It is unfortunate that physicians feel it is an "onus" to be asked by School systems to verify there is a medical problem before granting a medical transfer from one school to another. The physician does not grant the transfer, nor do they even apply for it. The transfer request is by the parent or guardian and the school system needs corroboration of the medical problem by competent medical examiners. If the physician feels this request is a ruse to transfer schools for other than medical reasons, and still gives a fictitious medical finding as justification for this transfer, then one has to question the motives of the physician.

School systems in Florida are long past the time when desegregation itself is a reason for requesting transfers. The usual reasons now are long bus rides, bad neighborhoods, supposedly inferior programs, and personality clashes. But if physicians are not honest in their medical appraisal of the need for transfer, these true problems may not surface.

School Boards do try to provide good programs in all their schools. Alas, we do not always succeed. But if a physician deliberately gives a false medical illness as a reason for transfer, I question seriously his desire to help the students who stay in that school or even the one who transfers. Would it not be better to refuse to be untruthful, and to push the parents, to push the principal, to push the superintendent, to push the Board to solve the real problem.

There is no dilemma. Simply be honest. If there is no reason, say so. The parents are not told to go to a Doctor and get a transfer. They are told that transfers are granted only for legitimate medical reasons and you must get a Doctor to verify it. If there is no reason, say so and you will soon find you are not asked to give false witness.

The children can be the big winners in a school transfer denial. It forces the parents to work to improve the schools and the school system, instead of avoiding the issue. School Boards need all the help they can get in their attempts to improve education in the light of the shrinking educational dollar and this could be one way for you to help. If you have a gripe abut the way the system is working, take your complaint to the School Board. They might be very receptive I know our Board is receptive. Why not try yours.

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Dr. Kimmel is President of the Florida Academy of Family Physicians, a Member, School Board of Palm Beach County, and First VP, Florida School Boards Association, West Palm Beach.

Reprinted from the Imperial Polk County Medical Association Bulletin, February 1979.

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**A little daily dose of success is enough to keep most of us going.**

# Medical Decision Doctor or School Board Rebuttal

A. Dane Sawyer Jr., M.D.

This is a response to an editorial by Doctor Bernard Kimmel of West Palm Beach. I am pleased to see my editorial in the Polk County Medical Association Bulletin of October, 1978 and reprinted in the December FMA Journal, has stimulated a response. In reply to the editorial herein I have the following comment.

I have several "inferences" of my own in response to Doctor Kimmel's commentary on this thorny problem. From his remarks I conclude the following:

1) He failed to get the message of my article; in essence he is reiterating what I have already stated with, perhaps, a different emphasis.

2) His cynical implications concerning the integrity of his medical colleagues in dealing with this problem honestly is moot.

3) The latter two of his four "usual reasons for transfer" represents the crux of what I consider to be bona fide reasons for school transfers that are not being accepted as the responsibility of the school administration and are being unloaded on the medical profession.

4) I agree with his statement that School Boards do try to provide good programs in all their schools, but they are not all good, or equivalent. If a student is suffering emotionally because of these inequities and the problem is not being corrected, why shouldn't the child's physician intercede in his behalf? Is the individual not more important than the system? I am an advocate of changing the system, but its inertia is staggering.

5) There still exists a dilemma, and redefined, it is: How do you help a student in difficulty while waiting for the system to improve?

Dr. Kimmel and I have the same objective — improving the educational process for the children of Florida. As he suggested, constant input into the school programs by concerned parents is a necessity. School Boards are elected representatives of the people; they must be receptive to the needs of their students. We all should demand and support excellence. While awaiting the millenium, I will continue to deal with children on an individual basis and not sacrifice them as martyrs in a long suffering cause by ignoring their immediate needs.

Reprinted from The Imperial Polk County Medical Association Bulletin, February 1979.

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**One good man is better than three fair ones.**

**E. Claiborne Robins**

A Public Service of this magazine & The Advertising Council Ad Council

# Your Business can be one, too.

Red Cross needs individual volunteers, and donors of blood and money, by the millions.

But we need even more help. We need the solid support of American Business. And we never needed it more.

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Last year, with help from our friends, we offered major aid at over 30,000 disasters—from typhoons, to local (but just as devastating) house fires.

We were able to help the elderly with practical programs, we helped veterans by the hundreds of thousands, we taught people by the millions to swim or swim better. And that's just the tip of the iceberg.

Think of America without The American Red Cross.

And you'll know why we need your business as a Red Cross Volunteer. In your community. And all across America. Contact your local Red Cross Chapter to see how your company can become a volunteer.

**Red Cross is counting on you.**

# Medical News Around the State

Dr. Friedrich

**Eduard Georg Friedrich, Jr., M.D. . . .** has been appointed Professor and Chairman of the University of Florida College of Medicine's Department of Obstetrics and Gynecology.

Dr. Friedrich, a 1963 graduate of Johns Hopkins University School of Medicine, most recently was Acting Chairman of the Department of Obstetrics and Gynecology at the Medical College of Wisconsin.

**FMA President-Elect Thomas B. Thames, M.D., of Orlando . . .** has been designated by the Association to serve on the 11-member Board of Governors of the Florida Patient's Compensation Fund.

His alternate will be John Thrasher, J.D., of Jacksonville, FMA Legal Counsel.

Meanwhile, State Insurance Comissioner Bill Gunter announced the appointment of James W. Walker, M.D., of Jacksonville, to serve on the 11-member board. Dr. Walker is President of Professional Insurance Management Company (PIMCO).

**The American Medical Writers Association . . .** has chosen a Florida physician's book as the best medical book of the year. Cited was a 436-page volume entitled "The Fine Art of Prescribing Glasses Without Making a Spectacle of Yourself," by Melvin Rubin, M.D., of Gainesville, and Benjamin Milder, M.D., of St. Louis, Missouri.

Dr. Rubin is Chairman of the Department of Ophthalmology, University of Florida College of Medicine. The book is geared to solving everyday problems in refraction, using lively but realistic case presentations to illustrate various dilemmas often encountered.

**Three Florida physicians . . .** are among the latest group of 87 physicians to be elected to Fellowship in the American College of Cardiology. They will be inducted formally at a convocation to be held in connection with the College's 29th Annual Scientific Session in Houston, Texas, March 9-13, 1980.

The Floridians are: Alan S. Brenner, M.D., Lakeland; Robert V. Carida, M.D., Plantation; and Joseph S. Schwartz, M.D., Clearwater.

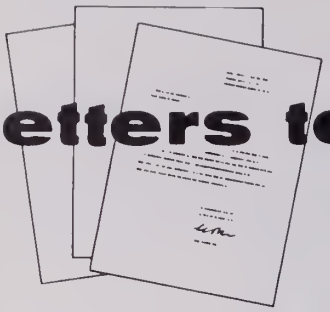
Dr. Barness

**Two Florida pediatricians . . .** were listed in the Special Fall Issue of *Harper's Bazaar* as among the country's "best medical specialists for children."

The magazine identified Lewis A. Barness, M.D., of Tampa as one of the best all-around pediatricians, and Gerold L. Schiebler, M.D., of Gainesville, as one of seven top pediatric cardiologists.

Dr. Barness is Professor and Chairman of the Department of Pediatrics of the University of South Florida College of Medicine. Dr. Schiebler is Professor and Chairman of the Department of Pediatrics of the University of Florida College of Medicine and Editor of *The Journal.*

*Harper's* said it constructed its list of the nation's best in various pediatric specialties through a poll of 25 U.S. medical school pediatric department chairmen selected at random.



# Letters to the Editors

## OCTOBER JOURNAL

**Daniel B. Nunn, M.D.**
**2105 Park Street**
**Jacksonville, Florida 32204**

**Dear Dan:**

I have seen the October issue of *The Journal of the Florida Medical Association* and I want to congratulate you for being the guest editor of such a splendid edition and special issue on thoracic and cardiovascular surgery. This is a superb first-class issue and all of us who are members of FMA should be proud of our journal and its increasing reputation under the editorship of Gerry Schiebler and the production of such special issues as this one and others in the past.

With best regards,

Sincerely yours,
*George S. Palmer, M.D.*
*Executive Director*
*Board of Medical Examiners*
*Tallahassee*

## 1979 MEDICAL PRACTICE ACT

**William G. Stafford**
**Executive Vice President**
**Broward County Medical Society**
**2200 S. Andrews Avenue**
**Post Office Box 22907**
**Ft. Lauderdale, Florida 33335**

**Dear Bill:**

Your letter of September 12, 1979 to George S. Palmer, M.D., Executive Director of the State Board of Medical Examiners, which you kindly furnished FMA a copy has been referred to me. Obviously, I cannot answer all the questions you propounded to Dr. Palmer, but I feel I can respond on behalf of the Association to some of the questions you raised which were as follows:

> "We recall during the hearings on the bill that the Department would investigate all complaints. Does this mean those normally handled by county society grievance committee? Are we to forward these to DPR? Are our Boards of Censors who deal in ethical breaches to be disbanded?

It is my opinion that the revised Medical Practice Act and the revisions contained in Chapter 79-36, which relates to the Department of Professional Regulation, has in no way changed the responsibility of the county medical society for investigating and taking action upon alleged breaches of medical ethics or other medical society bylaws. The Medical Practice Act in Section 458, continues to maintain the requirement that disciplinary actions by medical organizations be reported although these reports are now to be made to the Department as opposed to the Board of Medical Examiners. Again, in summary I do not feel that either of the aforesaid mentioned statutes have in any way substantively changed the traditional function of the County Medical Society Boards of Censors or Grievance Committees.

Sincerely,
*John E. Thrasher*
*FMA Legal Counsel*

In therapy of skin and skin structure infections
due to susceptible strains of staphylococci and/or streptococci...

# THE FIRST ORAL CEPHALOSPORIN THAT WORKS NIGHT AND DAY ON A SINGLE DOSE

# DURICEF®

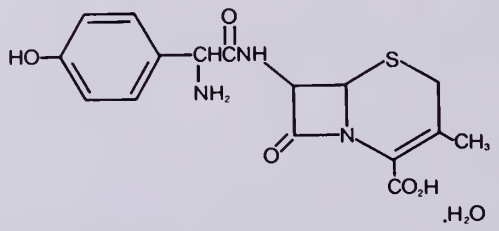
(CEFADROXIL MONOHYDRATE)

# DURICEF®

# (CEFADROXIL MONOHYDRATE)

**References:**
1. Data on file, Mead Johnson Pharmaceutical Division.
2. Gatley MS: To be taken as directed. *J Ray Coll Gen Pract* 16:39, 1968.

**DESCRIPTION:** DURICEF® (cefadroxil monohydrate) is a semisynthetic cephalosporin antibiotic intended for oral administration. It is a white to yellowish-white crystalline powder. It is soluble in water and it is acid-stable. It is chemically designated as 7-[[D-2-amino-2-(4-hydroxyphenyl)acetyl]amino]-3-methyl-8-oxo-5-thia-1-azabicyclo [4.2.0]oct-2-ene-2-carboxylic acid monohydrate. It has the following structural formula:




**Clinical Pharmacology**–DURICEF (cefadroxil monohydrate) is rapidly absorbed after oral administration. Following single doses of 500 and 1000 mg., average peak serum concentrations were approximately 16 and 28 mcg./ml., respectively. Measurable levels were present 12 hours after administration. Over 90 percent of the drug is excreted unchanged in the urine within eight hours. Peak urine concentrations are approximately 1800 mcg./ml. during the period following a single 500 mg. oral dose. Increases in dosage generally produce a proportionate increase in DURICEF urinary concentration. The urine antibiotic concentration, following a 1 gm. dose, was maintained well above the MIC of susceptible urinary pathogens for 20 to 22 hours.

**MICROBIOLOGY:** *In vitro* tests demonstrate that the cephalosporins are bactericidal because of their inhibition of cell-wall synthesis. DURICEF is active against the following organisms *in vitro*:

*Beta-hemolytic streptococci*
*Staphylococci*, including coagulase-positive, coagulase-negative, and penicillinase-producing strains
*Streptococcus (Diplococcus) pneumoniae*
*Escherichia coli*
*Proteus mirabilis*
*Klebsiella* species

**Note**–Most strains of *Enterococci (Streptococcus faecalis* and *S. faecium)* are resistant to DURICEF. It is not active against most strains of *enterobacter species*, *P. morganii*, and *P. vulgaris*. It has no activity against *Pseudomonas* or *Herella species*.

**Disc Susceptibility Tests**–Quantitative methods that require measurement of zone diameters give the most precise estimates of antibiotic susceptibility. One recommended procedure (CFR Section 460.1) uses cephalosporin class disc for testing susceptibility; interpretations correlate zone diameters of the disc test with MIC values for DURICEF. With this procedure, a report from the laboratory of "resistant" indicates that the infecting organism is not likely to respond to therapy. A report of "intermediate susceptibility" suggests that the organism would be susceptible if the infection is confined to the urinary tract, as DURICEF produces high antibiotic levels in the urine.

**INDICATIONS:** DURICEF (cefadroxil monohydrate) is indicated for the treatment of the following infections when caused by susceptible strains of the designated microorganisms:

Urinary tract infections caused by *E. coli, P. mirabilis*, and *Klebsiella* species

Skin and skin structure infections caused by staphylococci and/or streptococci

**Note**–Culture and susceptibility tests should be initiated prior to and during therapy. Renal function studies should be performed when indicated.

**CONTRAINDICATION:** DURICEF (cefadroxil monohydrate) is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

**WARNING: IN PENICILLIN-ALLERGIC PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE USED WITH GREAT CAUTION. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES OF PATIENTS WHO HAVE HAD REACTIONS TO BOTH DRUGS (INCLUDING FATAL ANAPHYLAXIS AFTER PARENTERAL USE.)**

Any patient who has demonstrated a history of some form of allergy, particularly to drugs, should receive antibiotics cautiously and then only when absolutely necessary. No exception should be made with regard to DURICEF (cefadroxil monohydrate).

**PRECAUTIONS:** Patients should be followed carefully so that any side-effects or unusual manifestations of drug idiosyncrasy may be detected. If a hypersensitivity reaction occurs, the drug should be discontinued and the patient treated with the usual agents (e.g., epinephrine or other pressor amines, antihistamines, or corticosteroids).

DURICEF (cefadroxil monohydrate) should be used with caution in the presence of markedly impaired renal function (creatinine clearance rate of less than 50 ml/min/1.73M²). (See Dosage and Administration.) In patients with known or suspected renal impairment, careful clinical observation and appropriate laboratory studies should be made prior to and during therapy.

Prolonged use of DURICEF may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs test may be due to the drug.

**USAGE IN PREGNANCY:** Although no teratogenic or anti-fertility effects were seen in reproductive studies in mice and rats receiving dosages greater than the normal human dose, the safety of this drug for use in human pregnancy has not been established. The benefits of the drug in pregnant women should be weighed against a possible risk to the fetus.

**ADVERSE REACTIONS:** Gastrointestinal–The most frequent side-effect has been nausea. It was infrequently severe enough to warrant cessation of therapy. Administration with food decreases nausea and does not decrease absorption. Diarrhea and dysuria have also occurred.

**Hypersensitivity**–Allergies (in the form of rash, urticaria, and angioedema) have been observed. These reactions usually subsided upon discontinuation of the drug.

Other reactions have included genital pruritus, genital moniliasis, vaginitis, and moderate transient neutropenia.

**DOSAGE AND ADMINISTRATION:** DURICEF (cefadroxil monohydrate) is acid stable and may be administered orally without regard to meals. Administration with food may be helpful in diminishing potential gastrointestinal complaints occasionally associated with oral cephalosporin therapy.

**Adults**–For urinary tract infections the usual adult dosage is one gm. (two 500 mg. capsules) two times per day. For skin and skin structure infections the usual dose is 500 mg. two times per day or 1 gm. once a day.

In patients with renal impairment, the dosage of cefadroxil should be adjusted according to creatinine clearance rates to prevent drug accumulation. The following schedule is suggested. In adults, the initial dose is 1 gm. of DURICEF (cefadroxil monohydrate) and the maintenance dose (based on the creatinine clearance rate [ml/min/1.73M²]) is 500 mg. at the time intervals listed below.

| Creatinine Clearances | Dosage Interval |
|---|---|
| 0-10 ml/min | 36 hours |
| 10-25 ml/min | 24 hours |
| 25-50 ml/min | 12 hours |

Patients with creatinine clearance rates over 50 ml/min may be treated as if they were patients having normal renal function.

**Children**–Dosage and safety have not yet been established in children.

**HOW SUPPLIED:** DURICEF® (cefadroxil monohydrate) capsules 500 mg. for oral administration in an opaque maroon cap and opaque white body No. 0 hard gelatin capsule. On each half capsule printed in black is "MJ" and "500." Available in bottles of 24 capsules (NDC 0087-0784-41) and 100 capsules (NDC 0087-0784-42).

U.S. Patent Re. 29,164

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# FMA AUXILIARY

# Child Abuse and Neglect

Child abuse is an epidemic in this country. Nearly two million American children ages 3 to seventeen annually are physically abused by their parents. This figure does not include children who are neglected or cases which are never reported.

A definition of child abuse is an injury or pattern of injuries to a child which is not accidental in nature. This includes damage to the child for which there is no reasonable explanation and encompasses nonaccidental physical injury, sexual molestation, emotional abuse, and neglect.

This is the International Year of the Child, proclaimed by the United Nations. This is an invitation to renew our concern for children everywhere. Children are our future and our most precious resource. We must focus on their needs and try to improve their lives.

The Florida Medical Association Auxiliary theme last year was "Year of Awareness." The information gathered through the year made the Auxiliary aware of the need to become involved in the area of child abuse.

The first project accomplished was to prepare a brochure on the physician's responsibility in reporting child abuse. This was done at the request of the Florida Medical Association's Executive Committee. The title of the brochure is "Professional Responsibility to Abused and Neglected Children: A Synopsis of the Law." The brochure has been distributed to each physician in the Florida Medical Association. The publication was prepared as a guide to physicians and other professionals who are held responsible by law for treating and reporting child abuse cases.

A second brochure was also prepared and distributed to each county Florida Medical Association Auxiliary. The title of this brocure is "Child Abuse and Neglect in Florida: A Point of Origin for Service Organizations." It was compiled as a resource for members who are interested in lending help to abused and neglected children and their families. The Auxiliary now feels that this brochure should be submitted to school officials and personnel because they are in a position to recognize child abuse early. The School Health Advisory Committee of the Florida Medical Association has approved distribution of the brochures. The State Department of Education has been receptive to the idea. The Auxiliary hopes to implement this project during the school year.

The theme for the 1979-80 Florida Medical Association Auxiliary is "Pearls of Wisdom: Communication, Education, Motivation." Each one of these "pearls" is so needed in working with child abuse. The Florida Medical Association Auxiliary has created an ad hoc committee to deal with child abuse and related problems. The committee is acting as a task force of interested members to study the child abuse problem and to propose some areas of involvement of the Auxiliary and its individual members. Some areas being explored are: 1) legislative advocacy — lobbying; 2) developing treatment programs; 3) lay therapy training and programs — such as parenting programs in schools; 4) volunteer services to agencies, and 5) establishing self-help chapters for abusive parents.

Each county has formed a child abuse and neglect committee. They will guide their individual county involvement in their own community based on local interest and needs. The county and state auxiliary will then support each other in this important work.

Child Abuse is everyones problem. Communities in Florida are slowly coming to view child abuse as their own problem. Physicians, their medical societies, physician's wives and their respective auxiliaries must become involved in dealing with this serious community problem. It would be wise for us all to remember what William Wordsworth said: "The child is father of man."

Lo Ann Trask
Child Abuse Chairman
FMA Auxiliary

# MEETINGS

## Approved by the FMA Committee on Continuing Medical Education

JANUARY

**The Psychotherapy of Schizophrenia and Severe Depression,** Jan. 2-4, Holiday Inn Surfside, Daytona Beach. For information: Beatrice Silverman, M.D., 1220 Willis Avenue, Daytona Beach 32014.

**Mid-Winter Cruise on Intensive Care,** Jan. 5-15, Aboard the "S/S DORIC".*

**Update of Shock — 1980,** Jan. 8, Manatee Memorial Hospital Auditorium, Bradenton. For information: Leonides Y. Teves, M.D., 706 39th St., W., Bradenton 33505.

**17th Annual Postgraduate Seminar in Anesthesiology,** Jan. 10-13, Americana Hotel, Miami Beach. For information: Dept. of Anesthesiology, Mt. Sinai Medical Center, 1200 N.W. 10th Ave., Miami 33136.

**Law and the Emergency Department,** Jan. 11, Miami. For information: Emergency Medical Services Symposium, 3900 N.W. 79th Ave., Suite 469, Miami 33166.

**25th Annual Cardiovascular Seminar,** Jan. 11-12, Holiday Inn, Longboat Key. For information: E. Jerry Eatman, P.O. Box 12407, St. Petersburg 33733.

**Trinidad/Tobago Seminar,** Jan. 13-20, Trinidad, West Indies. For information: Dept. of Anesthesiology, Mt. Sinai Medical Center, 1200 N.W. 10th Ave., Miami 33136.

**Second Annual Walt Disney World Pulmonary Wintercourse,** Jan. 14-17, Contemporary Resort Hotel, Lake Buena Vista. For information: Asher Marks, M.D., Chairman, Pulmonary Wintercourse Planning Committee, c/o Florida Lung Association, Box 8127, Jacksonville 32211.

**Oral Pathology Review,** Jan. 16-18, University of Miami School of Medicine, Miami.*

**Art and Science in the Therapy of Difficult Problems in Surgery,** Jan. 16-19, Americana Hotel, Bal Harbour.*

**Leukemia: The Window Into Cancer,** Jan. 19, Boca Raton Community Hospital, Boca Raton. For information: Dorothy M. Murray, M.D., 600 S. Dixie Hwy., Boca Raton 33432.

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***For information: Contact Division of Continuing Medical Education, D23-3, University of Miami School of Medicine, P.O. Box 016960, Miami 33101. Tel. (305) 547-6716.**

****For information: Contact Division of Continuing Education, Box J-233, J. Hillis Miller Health Center, Gainesville 32610. Tel. (904) 392-3143, or 392-3183.**

**+For information: Contact Janifer M. Judisch, M.D., CME, University of South Florida, Tampa 33620. Tel. (813) 974-2074.**

**Continuing Education in Pediatrics — 1980,** Jan. 20-24, Diplomat Resorts, Hollywood Beach. For information: Donald H. Altman, M.D., 6125 S.W. 31st St., Miami 33155.

**Gynecologic Surgery Symposium,** Jan. 20-25, Royal Biscayne Beach Hotel & Racquet Club, Key Biscayne.*

**Echocardiography In-Service Workshops,** Jan. 21-25, University of Miami, Jackson Memorial Medical Center, Miami.*

**Coronary Artery Disease 1980: Evaluation and Management,** Jan. 23-27, Florida Medical Center, Ft. Lauderdale. For information: Mrs. Pat Phillips, Dept. of Nuclear Medicine, Florida Medical Center, 5000 W. Oakland Park Blvd., Ft. Lauderdale 33313.

**Current Concepts in Intensive Care for Neurological Trauma and Disease: A New Decade,** Jan. 24-27, Americana Hotel, Bal Harbour.*

**Coronary Disease, Exercise Testing and Cardiac Rehabilitation,** Jan. 25-27, Konover Hotel, Miami. For information: International Medical Education Corp., Div. of Postgraduate Education, Dept. 12, 64 Inverness Dr., E., Englewood, CA 80112.

**Far East Orient Seminar in Anesthesiology,** Jan. 26-Feb. 10, Philippines/Hong Kong/Thailand — Honolulu (optional). For information: Dept. of Anesthesiology, Mt. Sinai Medical Center, 1200 N.W. 10th Ave., Miami 33136.

**International G. I. Conference,** Jan. 27-29, Dutch Inn, Lake Buena Vista. For information: Orris O. Rollie, M.D., 601 East Rollins, Orlando 32803.

**Pediatric Nephrology VII,** Jan. 27-30, Americana Hotel, Bal Harbour.*

**Family Practice Clinical Conference,** Jan. 27-Feb. 1, Lake Buena Vista. For information: Orris Rollie, M.D., Florida Hospital, Orlando.

**7th Annual Symposium in Pediatric Nephrology: Current Concepts in Diagnosis and Management,** Jan. 28-31, Miami.*

**A Neurological Update,** Jan. 28-Feb. 1, Americana Hotel, Bal Harbour.*

**5th Annual Review and Recent Practical Advances in Pathology,** Jan. 28-Feb. 1, Americana Hotel, Bal Harbour.*

FEBRUARY

**4th Annual Cardiovascular Symposium — Cardiovascular Pharmacology and Therapeutics,** Feb. 1-2, Sheraton Sand Key, Clearwater Beach. For information: Donald R. Eubanks, M.D., 323 Jeffords St., Clearwater 33517.

**Cardiology at the Dark Continent**, Feb. 1-2, Busch Gardens, Tampa.+

**Florida Society of Pathologists Annual Slide Seminar (Diagnostic Problems in Soft Tissue Tumors and GYN Pathology) plus a Seminar in Cardiovascular Pathology**, Feb. 2-3, Konover Hotel, Miami Beach. For information: Morton Robinson, M.D., Mt. Sinai Hospital, 4300 Alton Rd., Miami Beach 33140.

**"Imageology 1980" 18th Annual Seminar**, Feb. 2-8, Fontainebleau Hilton, Miami Beach. For information: Lucy R. Kelley, c/o Miami Seminars, Box 343762, Coral Gables 33134.

**12th Annual Postgraduate Seminar in Adult & Pediatric Urology**, Feb. 6-9, Hotel Intercontinental, Miami. For information: Victor Politano, M.D., 6614 Miami Lakes Dr., East Miami Lakes 33014.

**National Burn Seminar**, Feb. 8-9, Gainesville Hilton, Gainesville.**

**Family Practice Weekend, University of South Florida**, Feb. 8-10, Holiday Inn, Airport, Tampa. For information: Frederick Firestone, M.D., Dept. of Family Medicine, University of South Florida College of Medicine, Tampa 33612.

**Decision-Tree Approach to Diagnostic Radiology**, Feb. 8-11, Dutch Inn, Lake Buena Vista. For information: Lucy R. Kelley, c/o Miami Seminars, Box 343762, Coral Gables 33134.

**Gynecologic Oncology Seminar**, Feb. 10-15, Royal Biscayne Beach Hotel & Racquet Club, Key Biscayne.*

**Brief Therapy of Stress Response Syndromes**, Feb. 14, Holiday Inn, Plantation. For information: Peggy Jackson, ACSW, 330 S.W. 27th Ave., Ft. Lauderdale 33312.

**Glaucoma**, Feb. 14-16, Holiday Inn, Civic Center, Miami.*

**1st Annual Family Practice Update**, Feb. 18-22, Daytona Beach. For information: Ken Mead, Post Office Box 1990, Daytona Beach 32015.

**Nuclear Cardiology In-Service Workshop**, Feb. 18-22, University of Miami, Jackson Memorial Medical Center, Miami.*

**Medicine and Marriage Workshop (extension of Conference on the Beach: 1st Annual FP Update)**, Feb. 23, Daytona Hilton, Daytona Beach Shores, For information: Richard W. Dodd, M.D., Box 1990, Daytona Beach, 32015.

**Florida Midwinter Seminar in Ophthalmology & Otolaryngology**, Feb. 24-Mar. 1, Bahia Mar Hotel, Ft. Lauderdale.*

**12th Teaching Conference in Clinical Cardiology**, Feb. 27-Mar. 1, Americana Hotel, Bal Harbour.*

**7th Annual Selected Topics in Urology**, Feb. 28-Mar. 1, Gainesville Hilton, Gainesville.**

**Pediatric Dermatology Seminar**, Feb. 28-Mar. 2, Eden Roc Hotel, Miami Beach. For information: Guinter Kahn, M.D., 16800 N.W. 2nd Ave., Suite 401, North Miami Beach 33169.

**Basic Life Support**, Feb. 29, Pasco-Hernando Community College, New Port Richey. For information: James M. Marlowe, M.D., Box 249, Elfers.

**EKG Interpretation and Arrhythmia Management**, Feb. 29-Mar. 2, Sheraton Hotel, Ft. Lauderdale. For information: International medical Education Corp., Div. of Postgraduate Education, Dept. 12, 64 Inverness Dr., E., Englewood, CA 80112.

**Ninth Annual Postgraduate Seminar in Dermatology**, Feb. 29-Mar. 2, Carillon Hotel, Miami Beach.*

## MARCH

**Advanced Cardiac Life Support**, Mar. 1-2, Pasco-Hernando Community College, New Port Richey. For information: James M. Marlowe, M.D., Box 249, Elfers, Florida 33531.

**Oncology for Family Practitioner and Internist**, Mar. 1-8, Caribbean Cruise.*

**OB-GYN Caribbean Cruise.***

**Basic Neurology for Psychiatrists and Generalists**, Mar. 3-7, Konover Hotel, Miami Beach.*

**Postgraduate Medical Refresher Course**, Mar. 3-14, Galt Ocean Mile Hotel, Ft. Lauderdale. For information: Donald R. Lannin, M.D., 832 Central Medical Building, St. Paul, MN 55104.

**Mediclinics**, Mar. 3-14, Galt Ocean Mile Hotel, Ft. Lauderdale. For information: Donald R. Lannin, M.D., 832 Central Medical Bldg., St. Paul, MN 55104.

**Contact Dermatitis**, Mar. 4, Boca Raton Community Hospital, Boca Raton. For information: John P. Kinney, M.D., Box 3167, West Palm Beach 33402.

**Diagnostic Radiology for the Emergency & Primary Care Physicians**, Mar. 5-9, Pier 66, Ft. Lauderdale. For information: W. T. Haeck, M.D., 3900 N.W. 79th Ave., Suite 469, Miami 33166.

**6th Annual Virginia Apgar Seminar**, Obstetric and Pediatric Anesthesia, March 7-9, Americana Hotel, Miami Beach. For information: Dept. of Anesthesia, Mt. Sinai Medical Center, 1200 N.W. 10th Ave., Miami 33136.

**Critical Pulmonary Care**, Mar. 8-9, University of South Florida College of Medicine, Medical Center Auditorium, Tampa. For information: Allan Goldman, M.D., Pulmonary Disease Section (111C), 13000 North 30th St., Tampa 33612.

**15th Annual Postgraduate Course in Internal Medicine — 1980**, Mar. 9-15, Americana Hotel, Bal Harbour.*

**Problems in Rheumatology**, March 12-15, Don CeSar Beach Resort Hotel, St. Petersburg Beach. For information: Bernard F. Germain, M.D., Division of Rheumatology, Dept. of Internal Medicine, University of South Florida College of Medicine, Tampa 33612.

**Ob-Gyn Cruise Seminar**, Mar. 12-24, Aboard the "DORIC".*

**14th Annual American Cancer Society Clinical Cytopathology, Workshop**, Mar. 14-15, Eckerd College, St. Petersburg. For information: Ira Evans, M.D., c/o American Cancer Society, Pinellas County Unit, 1001 S. McDill Ave., Tampa 33609.

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INTERNIST OR FAMILY PRACTITIONER for private, non-profit multispecialty facility. Must be Board Certified or Board Eligible. Must be able to achieve hospital privileges. Excellent compensation package. No overhead. Contact: Byron S. Arbeit, Executive Director, Mid-County Medical Center, 8190 Okeechobee Boulevard, West Palm Beach, Florida 33411, or call (305) 684-1119.

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MULTISPECIALTY GROUP OF PHYSICIANS located in North Florida seeking to expand in the following specialties: Rheumatology, Gastroenterology, Hematology/Oncology, Endocrinology and Infectious Diseases. Please send curriculum vitae to: C-928, P.O. Box 2411, Jacksonville, Florida 32203.

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INTERNIST, RHEUMATOLOGIST AND NEUROSURGEON wanted to associate with an expanding established group of individually incorporated physicians on the North Florida Gulf Coast. An excellent opportunity for persons who want to run their own practice and live on the coast without the problems of a large city. Write C-947, P.O. Box 2411, Jacksonville, Florida 32203.

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DIRECTOR — Multi-County Health Unit — North Central Florida — full-time, liberal fringe benefits, must be trained and/or experienced in public health, licensed in Florida. Send application or call John E. Boysen, M.D., (904) 377-4242, District III Health Program Supervisor.

OB-GYN DIRECTOR — Opening for Director of Residency Program in OB-Gyn in Pensacola Educational Program, Pensacola, Florida for Board Certified or Board eligible physician. Total program of six different residencies associated with four different hospitals in community based educational program: Salary competitive with excellent fringe benefits of paid vacation, liability insurance, health and disability insurance, paid educational and professional trips. OB program affiliated with Tulane. Gulf Coast living at its best, and health care in area of over ¼ million. If interested in teaching and patient care, call collect: Dr. R. D. Nauman, Director of Medical Education, (904) 477-4956, or send CV to Director of Medical Education, Pensacola Educational Program, Suite #307, 5149 N. Ninth Avenue, Pensacola, Florida 32504.

NEUROLOGIST — 32-man multispecialty group located in West Palm Beach with all major disciplines represented, currently actively recruiting a neurologist for a position in 12-man internal medicine department. Board eligible or board certified. Candidates may apply to Richard C. Hudson, M.D., P.O. Box 13167, West Palm Beach, Florida 33402. Telephone (305) 832-8531.

OB-GYN — Female Ob-Gyn physician from India, in Fort Lauderdale, Florida, interested in a female Associate. Financial arrangements negotiable. Write 5680 S.W. 9th Street, Plantation, Florida 33317, or call (305) 587-2301.

WANTED — Board qualified in Internal or Family Practice Medicine to associate with Dr. H. M. Silberman, 470 Biltmore Way, Coral Gables, Florida. Call (305) 443-3001.

UNIVERSITY OF FLORIDA COLLEGE OF MEDICINE: Family practice faculty position at the assistant professor level to direct service and education program in rural community of 6,000, 30 miles from Gainesville. Practice requires interest in teaching residents and medical students in ambulatory medical care. Minimum of three years of practice experience required plus ABFP eligibility. Salary negotiable with liberal fringe benefits. Recruiting deadline is 12/31/79. Starting date is 2/1/80. Write or call: W. J. Coggins, M.D., Box J-222, J. Hillis Miller Health Center, University of Florida, Gainesville, Florida 32610, (904) 392-4527. EEO/Affirmative Action Employer.

INTERTISTS — PEDIATRICIANS — TAMPA BAY AREA — FLORIDA — Prepaid Health Care, a federally qualified HMO, has immediate openings for Internists and Pediatricians to complete the staffs of its St. Petersburg and Clearwater Ambulatory Care Facilities. Competitive salary and liberal fringe benefits with opportunity to participate in academic programs available. If interested, contact: Jerry S. Williamson, M.D., Medical Director, 1417 South Belcher Road, Clearwater, Florida 33516. (813) 535-3474.

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CAREER ORIENTED EMERGENCY PHYSICIAN to join young established group. Salary competitive. Respond with CV to: Hospital Emergency Physicians, P.O. Box 8944, Orlando, Florida 32806, or call: Robert P. Schiffer, M.D., (305) 843-3360.

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ASSISTANT PROFESSOR; Application recruiting deadline 12/14/79; Starting date 1/1/80; Salary negotiable. Neuropsychologist with Ph.D. in Psychology (Clinical) and post-doctoral training in neuropsychology. Applications to be sent to Department of Neurology, Box J-236, University of Florida, Gainesville, Florida 32610. Preference given to candidates with proven research ability in the following areas: attention, attentional disorders, laterality, and hemispace. "Equal Opportunity/Affirmative Action Employer."

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SITUATION WANTED: OB/GYN, 28, U.S. schooled and trained, seeks group or partnership position on East coast. Will consider all offers. Write C-943, P.O. Box 2411, Jacksonville, Florida 32203.

OB-GYN — Board Eligible, Florida licensed, seeks association or solo practice in Florida. Prefer Dade-Monroe counties. Please contact: Ted Kohn, M.D., 6441 N. Franciso Avenue, Chicago, Illinois 60645 (312) 761-8306.

PATHOLOGIST, 29, completing medical center residency July 1980, seeks position in Florida. Write 1772 Hausman Drive, Winston-Salem, North Carolina 27103, or call (919) 724-9270.

FAMILY PHYSICIAN wishes to buy practice or join group in Broward area. Curriculum Vitae on request. B. Reiter, 136 Roger Pilon, D.D.O., Quebec, Canada H9B 2B6. Telephone (514) 683-2765, in Florida (305) 454-4071.

GASTROENTEROLOGIST — INTERNIST solo, group or hospital based practice. Licensed in Florida, available July 1980. Write: Allan Effron, M.D., Box 593, Woodcliff Lake, New Jersey 07675.

SURGEON, 31, ABGS certified, completing residency in Univeristy of Alberta, seeks practice in cardiac, vascular, thoracic or general surgery. Address: N. Ioannou, 9315 Jasper Avenue, #11, Edmonton, Alberta, Canada, T5H3P3. Telephone (403) 429-0716.

ENDOCRINOLOGIST — INTERNIST, University trained, seeks subspecialty/specialty practice as associate or partner preferably along Gulf Coast. Other locations considered. Write C-951, P.O. Box 2411, Jacksonville, Florida 32203.

BOARD CERTIFIED OPHTHALMOLOGIST with seven years solo practice experience seeks opportunity for association or group practice. Write C-952, P.O. Box 2411, Jacksonville, Florida 32203.

PRACTICING CARDIOLOGIST experienced in cath. and all noninvasive techniques desires new affiliation with group or partner of same in Florida, particularly Jacksonville, Pensacola or Orlando. Call evenings after 8 p.m. CST, (913) 267-3069, or write C-953, P.O. Box 2411, Jacksonville, Florida 32203.

FAMILY PRACTICE — GENERAL SURGERY Florida license. Write D. O'Connor, M.D., 20 Continental Avenue, Forest Hills, New York 11375.

INTERNAL MEDICINE AND CARDIOLOGY Board Eligible. Expertise in Echo, stress testing, Holtor monitoring, Swan Gantz temporary pacemaker. Seeking hospital based, solo or group practice in internal medicine — cardiology. Age 29. Available July 1, 1980. Write C-956, P.O. Box 2411, Jacksonville, Florida 32203.

INTERNIST — GASTROENTEROLOGIST board eligible, current Florida license, expert all G.I. procedures, seeks position as internist or gastroenterologist. Available immediately, will consider any offer. Write C-955, P.O. Box 2411, Jacksonville, Florida 32203.

PEDIATRICIAN — 33. Board Eligible, university trained, three years military experience — seeks position — solo, group, hospital or clinic based programs or HMO. Available July 1980. Call (803) 556-4634.

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***The Journal's* classified advertising base rate will increase from $7.50 to $10.00 for the first 25 words or less, effective January 1, 1980. The additional wordage rate of 25 cents per word remains unchanged. New rates for display advertising, also effective January 1, are available upon request.**

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- ☐ Predictable patient response
- ☐ Minimal effect on mental acuity at recommended doses
- ☐ Minimal interference with many primary medications, such as antacids, anticholinergics, diuretics, cardiac glycosides and antihypertensive agents

**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications:** Relief of anxiety and tension occurring alone or accompanying various disease states. Efficacy beyond four months not established by systematic clinical studies. Periodic reassessment of therapy recommended.

**Contraindications:** Patients with known hypersensitivity to the drug.

**Warnings:** Warn patients that mental and/or physical abilities required for tasks such as driving or operating machinery may be impaired, as may be mental alertness in children, and that concomitant use with alcohol or CNS depressants may have an additive effect. Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported.

**Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

**Precautions:** In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

**Adverse Reactions:** Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

**Usual Daily Dosage:** Individualize for maximum beneficial effects. Oral—Adults: Mild and moderate anxiety and tension, 5 or 10 mg t.i.d. or q.i.d.; severe states, 20 or 25 mg t.i.d. or q.i.d. Geriatric patients: 5 mg b.i.d. to q.i.d. (See Precautions.)

**Supplied:** Librium® (chlordiazepoxide HCl) Capsules, 5 mg, 10 mg and 25 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10. Libritabs® (chlordiazepoxide) Tablets, 5 mg, 10 mg and 25 mg—bottles of 100 and 500. With respect to clinical activity, capsules and tablets are indistinguishable.

## *synonymous with relief of anxiety*

ROCHE

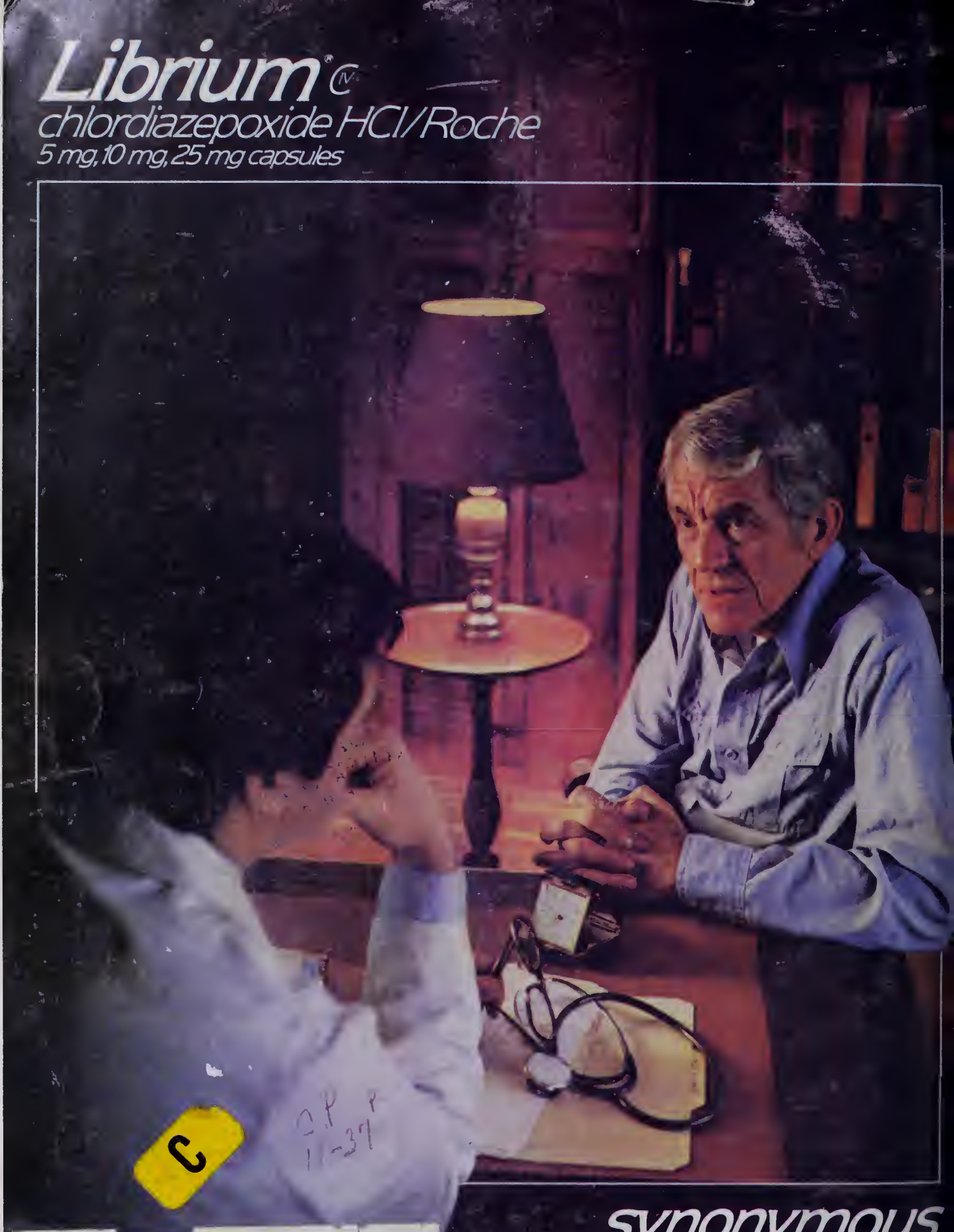
Roche Products Inc.
Manati, Puerto Rico 00701

**Please see following page.**

# Librium® (IV)

chlordiazepoxide HCl/Roche

5 mg, 10 mg, 25 mg capsules



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See preceding page for a summary of product information.

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